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BOSSY WOMAN IN GARIMA PRADHAN'S A GIRL THAT HAD TO BE STRONG

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ABSTRACT

The main aspect of my paper focuses towards the obstacles everyday faced by the women in the present modern-era society. In the novel *A Girl That Had To Be Strong* by Garima Pradhan, let's us to engage in a different perspective of living a peaceful life. The idea of fulfilling women's dream-career is not an easy task when compared to the issues faced by the men. The title of the paper is *Bossy Woman in A Girl That Had To Be Strong* by Garima Pradhan, opens up with the dignified and smart character Advika, who is born with the Hindu belief astrology predictions of *manglik dosh*, which brings negative impact possibilities in future. She is ready to face the barriers and miracles which she has to undergo in her everyday life. The occurrence of this problematic condition has also been faced by many women which gradually weighed down by the clutter in their lives. The subjectivity of this paper targets on the central character Advika, whose dreams is to clear the CIA (Certified Internal Auditor) exams but frequently gets tangled in struggles with family circumstances, friends and love relationship. In this predominant ill-treated society, she motivates herself with the support of her family to face all her nightmares. Will Advika change herself to accept the society? This novel also grasps the attention of many other women to have a unique personality and tends not to stop their efforts but instead, they can make themselves strong by overcoming failures to change the world.

It was ninth of September 1992, the last day of Ganesh Chaturdashi, formally known as “Ananth Chaturdashi.” On this day, roads were heavily crowded with people holding Ganesha’s idol for Ganesh Visarjan. It was a capturing moment as the aura of Ganesha is power pact in itself that it filled people with so much energy and enthusiasm that people from all age group were singing in one voice- “Ganapti Bappa Moreya, Mangal Murti Moreya” (Pradhan 1).

‘Ganesh Chaturthi’ is an auspicious Hindu festival which is celebrated all over India honouring the birth of Lord Ganesha. This celebration was seen in a wide-range of crowd for the first time in Bhopal. Mrs. Salila and Mr. Aadarsh are expecting a baby soon. When the day comes, they both were blessed with a girl baby. She was born out by the caesarean section which was not that successful during the ninety’s. Everyone were overwhelmed in inviting the new born brave girl in their home, which resembled their cast trait ‘Kayastha.’ “Kayastha community has an inborn fighter trait in them. They always stand up for right things in life, as they can’t sit calmly about any injustice caused to anyone, but it’s a quality which can be developed in oneself over a period of time by feeling for others pain too, which was a rare thing now” (Pradhan 3).

The family has a certain trait that the new born baby is not aware of. The trait is that, they do believe in astrology. On the day of name ritual ceremony, Pandit Anand discovered that the baby has kundli by considering her date of birth and she would hold a unique personality when she grows up and also named her ‘Advika’ which means- unique. She looks very beautiful and the reason behind it is she has Mangal dosh in her horoscope. Her father Mr. Aadharsh supported her a lot and ready to take up the responsibilities that every daughter needs where some of the parents gives importance only to the male child.

Indian society is multicultural and patriarchal, where a particular gender identity operates in a hierarchy along with other socio-cultural identities. In a male-dominated society, the male gender exercises more power and authority in comparison to females and transgender. Women in patriarchal societies are often perceived as second-class citizens, and in the same hierarchy, transgender people are perceived as third-class citizens or non-citizens (Sahu 13).

After two years, Myra is born as the youngest sister of Advika. They both were happy together and Advika protected her sister whenever she faces danger. Now Advika entered into her pre-school attaining the age of 4 years from MAC School. She had a small circle of friends and ranked among top-3 rankers of school and always stood 1st in class. Soon when some years passed by, during her middle-school her parents joined her in JSCS School which is one of the famous school in Bhopal. Advika missed her friends badly. She could not score high marks because of the English medium instruction. However with the encouragement from her parents, Advika managed to continue her schooling in JSCS only by securing average marks and executed her inner talents that included sketching, painting, poetry and writing skills. Her class teacher complimented her for her better performance and for her decent and disciplined behavior in school.

After a decade, Advika has completed her 10th grade with good percentage and gradually joined 11th grade in Commerce stream, but her parents insisted her to take up engineering or biology. Progressively she has completed her schooling, now it is her time to get admission in the colleges. It was the tough time to prepare for the competitive exams to qualify for good stream and take admissions into college. Advika has a keen interest in becoming a Chartered Accountant and was preparing for her CA- CPT (Common Proficiency Test) exam conducted by ICAI (Institute of

Chartered Accountants of India), where 100% of attendance is compulsory so she has joined APJ College which is under private institution where attendance is not an issue.

Advika started to focus on her entrance CPT exam, which is not a joke and she aim's to clear the CA exam is one of her dream-goal. Her parents were well in level of the reality and motivates her to concentrate on her career till she achieves it. Advika becomes dedicated, hard-working and also sacrificed over her sleep and preparing for her upcoming entrance CA exam. On the result day, Advika was in unbearable condition and got failed in her CPT exam and was short of 30 marks. She cried and hated herself for not making her parents proud. She is consoled by her sister Myra.

“You are a fighter Advika; you will do it next time for sure.” Just believe in yourself, you will do it. Advika wiped off her tears and made her vision clear for the next fight. She cannot afford to fail this time else, she will no longer continue this as her career path. Advika was a person who was good at lifting up others by motivating them but when it came to herself, she was helpless” (Pradhan 31).

Advika at first felt sad and disappointed but could not tolerate her failure. She usually boost up the confidence level of others when they are upset or faced failure. But when the same situation arises for Advika, she becomes helpless. “Only a CA student knows the “Pain of being failed in CA exams after giving their 100% efforts.” It pains more than an injury. If you actually want to taste the real meaning of failure, give CA exams once in your lifetime” (Pradhan 32).

Advika did not give up and did hard work regularly. She attempted her next CA entrance level exam and on the day of the result, she felt a minor heart attack when the page displayed her pass, displaying her marks 130/200. “On seeing her efforts pay off this time she could not control herself from bursting out in tears of success” (Pradhan 33). Advika is now qualified for CA-IPCC

with a batch of 200 students who all had the same dream in common to be a CA. Now Advika is back to her APJ College to write her first semester B. Com exam. Sabir, one of her classmate is a very close and verbatim brother to Advika helps her to sort out all the problems. Soon Advika encounters another classmate Danish. He usually underestimate girls a lot. He thought girls lack brains, on hearing this Advika angrily stares at him. This is where Advika first gets into the tangle of male domination. “Danish believed only men are born powerful. Forgetting the fact, there are many successful women’s in the Forbes list, popular for their brain, money, and position in society. To wipe off this sick mentality of men- Advika was on revolt to fight for every girl like her who had brains. Advika proved him wrong by her actions which shattered his ego” (Pradhan 45).

Soon Advika and Danish slightly started to like each other. But Advika did not like the character of Danish as he always disrespects women. Danish started observing the likes and dislikes of Advika and made it appear as his likes and dislikes too. But Advika always looked for a person who respected girls more than her looks. Danish decided to gift Advika a teddy bear and chocolate because it is especially considered as the weakness of many girls. So he thought to take one for Advika to impress her.

Advika too blushed at Danish but controlled her feelings inside and rejected the gifts from Danish. As she is so much conscious in fulfilling her dream career, clearing the CA exam. Danish approached Advika friends Sabir, Sagun, Sachi in wooing her. Few days passed where Advika was severely illand was unable to come to the college. Danish felt really upset and he missed Advika badly. Even she too missed Danish. Once when she got recovered from her illness she came back to college in a complete celebrity appearance. She was wearing pink kurti with black jeans with watch and shoes. She looked stunning that day. Everyone in the class admired her. Danish was very much

excited in seeing Advika and proposed her. She too accepted Danish. The love-blossom cherished between them.

Danish and Advika were now officially couples. They spent some lovely days together. When the days began to pass by, Advika noticed some desperate changes in Danish's behavior. "Danish started to expect changes from Advika and told her to dress up like a chick to coaching. Danish made Advika doubt her own beauty" (Pradhan 56). Advika strongly disapproved the conditional statements of Danish. Slowly the arguments began to start in their love relationship. Advika confessed to Danish that they both come to coaching for becoming CA, not a model. Furthermore as the days passed, Danish asked Advika to drink and smoke with him. But she is not interested in these kinds of activities as it brings bad name and bad reputation. And she also has her own ethics and principles to be followed. Later after some days it is proven that Danish did not love Advika truly because he just wants to prove that male power is higher than female. He strongly affirms that women are weaker sex. On realizing the true identity of Danish, Advika's true love on him seems blocked and felt heart-bursting pain. "Love is Blind They Say, She Completely Trusted Him And He Brought Her Closer To The Grave He Dig To Bury Her Heart." "Only fault of Advika was she trusted him blindly and loved him unconditionally. Advika could not forgive herself for loving a wrong person...She strongly refused him and removed him from her life forever" (Pradhan 63).

Advika decided to focus back on her career especially clearing her CA exams. She was admitted to a college for her post-graduation course in Finance at SVIM, a government college in Bhopal. On the result day, she got failed in first group but she passed in group-2 of IPC with an exemption in Audit. She got placed in ETP Pvt. Ltd through placement cell in the college. On the first day of joining as a fresher, her Boss Kapil introduced Advika to her team with a group of six

members. She was asked to attend training session for one week which will be given by her team members itself. As the days passed, Advika's team mates observed her grow and learn faster, which was becoming a roadblock for their bright future, especially for other team mates. "Advika was observing a change in their behavior, as she was new, she needed their help. However, they refused to help her and even mistreated her sometimes" (Pradhan 89).

Advika understood the environmental scenario of that company, and had self-respect. So she did not ask for help nor prefer taking favors from others. Gradually day by day, she was given more work and sending her late home. Many male team mates started to use Advika in completing their works. She was sent back home very late at 9.00 P.M which is not safe for the women. Her parents were also too worried about her coming home late. She resigned her job to get peace in her heart. She could not withstand the male dominant society.

"Relatives pressurize Manglik girls to get married in their family so that she does not turn up to become a competitor for their kinds of same age group. It feels like if they will not settle now, no boy will be left for marriage as if, all boys were dying together tomorrow" (Pradhan 131). Advika is now focusing on her future and so getting married is the last option in her life. She has undergone depression by getting cheated by a boy and mentally harassment in her work place. Soon Advika discovered a writer in her and found herself at peace when she used to pour out her heart through writing. She took writing as her career and future. She used to write personalized birthday messages for her friends but now she started to write to show the world her writing techniques.

Advika wished to start an NGO by winning readers hearts with her writing skills. She has choosed writing as her passion, which she wanted to use for bringing a change in mindset of society.

"Every parent wishes to see their kids successful but before tasting success they have to face

hardships and failure” (Pradhan 135). She eventually wrote poems of kids demanding to their parents which has become the highlight of newspaper which focused on her writing style. “Advika thanked Ganesha for making her reach the pinnacle of her life. Still next goals were now in her line. Finally she had to grow stronger from the things she went through” (Pradhan 139).

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ECOCRITICAL CONCERNS OF NATURE IN NAMITA GOKHALE’S TRILOGY ON HIMALAYAS

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ABSTRACT

Literature and the nature go hand in hand. Literature dealing with the majesty and force of nature is abundant. The writers' attention has recently been drawn to ecology and the danger that constant exploitation of our environment poses to humanity. This sense of worry has given rise to Eco-criticism, a new area of literary study. Eco criticism is the study of how nature is depicted in literary works and how literature and the environment interact. Literature and Eco criticism have a tight relationship. The essay discusses how Namita Gokhale's female protagonists attempt to preserve and revitalise their rural lifestyle and deep connection to their land. It provides instances of how readers can understand the concept of Eco criticism by reading the Himalayan trilogy by Namita Gokhale, which includes Things to Leave Behind, Himalayan Love Story, and The Book of Shadows.

Keywords: Eco-criticism, Ecology, Exploitation, Environment, Protagonist

Namita Gokhale is one of the most celebrated women novelists of the modern era. In 1956, she was born in Lucknow. Namita's early life was spent between New Delhi, Nainital, and the Himalayan foothills. She currently resides in Delhi. Namita's life was full of unique experiences that she used as a rich resource for her writing. We can assume that her rich life has given her a wide

pallet on which to paint. Namita Gokhale is the Co-director of the renowned Jaipur Literature

Festival. She has written nine books. The present article focuses on Namita's portrayal of the Kumaon hills and Nainital, a hill station in her novels.

Namita Gokhale, has been a tireless chronicler of life in the Kumaoni foothills. After *The Book of Shadows* (1999) and *A Himalayan Love Story* (1996) Namita Gokhale concludes her trilogy of works on the Himalayas with her brilliantly designed and constructed novel, *Things to Leave Behind* (2006). As she did in the previous volumes, she once again shows her talent for painting the most vivid pictures of the hills and dales in and around Nainital and Almora. Her attention to the smallest details, together with her almost photographic recollection of the sights and sounds she experienced as a kid and the tales she heard from her grandmother and grand-aunts, contribute to the creation of a virtual panorama in front of the reader's inner eye. The majority of the time, Gokhale's compositions are more introspective in nature and are not in response to her surroundings. She brings the readers into a state of meditation with her words, bringing them one step closer to the image she has in mind and allowing them to find their answer in a measured amount of words.

Namita Gokhale has fond of the nostalgic memories of bygone days. Although she was born in Lucknow, she spent her early years there in Nainital that doesn't exist for her as a location on a map or even as a physical place; rather, it follows her everywhere she goes. All of her memories congregate in her head when she travels to old places. She acknowledges that, "The overlays of remembrance and memory had coalesced into a dream territory which some part of me continued to inhabit"(226). She is inspired by these memories to write about the locations, people, and sights she has previously experienced. Even the seemingly insignificant details are crammed into her memory: "These were memories made up of brittle things: the texture of sticky summer lychees; the sound of langurs tramping about on the tin roof; the taste of fresh pine and deodar needles which the mali's

son insisted tasted just like chewing gum. And our Malju, the mali, the wizard, who fell off tiffin top chasing an errant cow"(226).

Her novels highlight her love of the Himalayas- Kumaon and Nainital. Settings often have significance in the works of writers. There are numerous examples that demonstrate that how old places are recreated. William Wordsworth refers to Lake District and Thomas Hardy to Wessex. A.K. Ramanujan and Jayant Mahapatra discuss their ties to their region. Namita Gokhale has memorable moments of the neighbourhood she lived in or belonged to. She incorporates these memories into the way she describes the settings in her novels.

The value of a novel can be determined by asking ourselves if we should read it again. If a novel becomes tedious after the first reading, it is not one. Like two of her earlier books, *Things to Leave Behind* is also set in the Himalayan Mountains. Its premise—the interconnected tales of a few Indian families through British rule—holds great creative promise. The first chapters' historical depth and poetic opening words suggest the possibility of a post-colonial reading. Some of the characters are endearing, particularly the Ayurveda doctor and his interactions with the king of Nepal and British officers. According to its preface, it is Gokhale's "most ambitious work yet".

Kumaon appears as the protagonist in *Things to Leave Behind*, *The Book of Shadows* and *A Himalayan Love Story* that comprises Gokhale's Himalayan trilogy. The word "Kumaon" derives from the phrase "Kurmanchal," which means "country of the Kurmavtar." Kurmavtar, one of the three gods of the Hindu Trinity, is said to be the tortoise-incarnation of Lord Vishnu, the Preserver, in Hindu mythology. The Kumaon region is divided into four districts: Pithoragarh, Almora, Udham Singh Nagar, and Nainital. These are all popular destinations for travellers, pilgrims, and hikers alike since they offer them a variety of sights, fascinating experiences, extreme obstacles, and religious

inspiration. Namita Gokhale is a descendant of the Kumaon Mountains. The area near Ranikhet, Almora, and Nainital is her favourite hunting ground. It is abundant in bird life, bears, panthers, porcupines, snakes, and a wide variety of butterflies. It is heavily forested with pine, deodar, oak, and rhododendron. The Himalayas, which are blanketed in snow to the north, keep hill streams pouring with ice-cold water throughout the summer. The Gangetic plains, which are to the south, heat up considerably in the summer. Kumaon is frequently referred to as the "Switzerland of India" due to its stunning lakes, rivers, towering snow-white peaks, vibrant flora, colourful birds, and attractive scenery. The picturesque hills, the pilgrimage sites, and the trekking glaciers all contribute to this grandeur and enhance Kumaon's natural beauty, making the hills alluring and eerie.

Things to Leave Behind, a rigorous work of art and literature has been hailed as Gokhale's most ambitious project, is both an ode and a eulogy to her home Kumaon. It is a monument to human desire for escape from the fetters that bind humanity. Those chains maybe caused by our gender, our colonisers, our sexuality, our independent will, or our strongest feelings.

In contrast to her previous works, *Things to Leave Behind* is more aspiring, intricate, and nuanced. It also represents a transition from the personal to the political to a point when the personal merges with the political. Historical occurrences have a lasting impact on a way of life that is about to change. The emerging and the dying worlds are poised to come together and integrate. The lines separating the traditional and modern, national and international are becoming less apparent.

The epoch Gokhale has selected is one of enormous turbulence, even though change is sluggish to come to the hills. Many significant events occur between the years 1840 and 1912, including the Great Revolt of 1857, which will be referred to as the "First War of Independence" years later; the expansion of British rule in India and the resulting awareness of colonialism among

the local population; the beginning of missionary activities combined with westernised ideas of health, hygiene, and education; the widespread use of English-medium schools; and the distribution of newspapers, books, and journals among readers; greater printing advancements; easy access to world literature through reasonably priced translations; a network of libraries and bookshops in the trimmed corners of smaller towns; and enhanced travel options due to better road and rail connections.

The novel explores the conflicted legacies of the British Indian past as well as the creation of a precarious modernity. It opens with a scene of six mountain ladies circling Naini Lake's waters while wearing black and scarlet pichauras. It captures the spirit of colonial times of the Lower Mall Road (for dogs, servants, and other Indians).and Upper Mall Road (reserved for Europeans and horses only). In this novel, Jayesh, Tilottama's husband, and Deoki, her problematic daughter, are the main characters. Tilottama's uncle is hanged during the Mutiny. The utopian Eden Abram is founded by the young missionary Rosemary Biden, and Jayesh enters it after converting to Christianity. It is a complicated story of intertwined cultures and the Himalayan region where they meet.

Mountains, lakes, meadows, landslides, hail, snow, and sleet are all present. Diesel exhausts from vehicles and buses. The people are tough and powerful but also somewhat disturbed. These mountains are among the youngest in the planet and are still growing and exploring.

Tilottama makes the captivating dominant character. Her departure from "normality" starts early on when her marriage is postponed due to India's gradual march towards independence, giving her access to a sliver of education and agency. Because of Tilottama's (also known as Tillie's) feminist tendencies, which are fuelled by her respect for Pandita Ramabai and the news she ingests from Almora Akhbar and Almorah Annals, fate is made worse. Despite of all that, Tillie is unable to

turn her independent thoughts into independent deeds, whether it be ensuring that her daughter receives a quality education or freely moving outside of her home. Through this character, Gokhale emphasises the struggles of independent-minded women in 19th-century India.

Namita Gokhale was brought up in Nainital. She misses Nainital, which brings her joy. She is well-versed in the geography, climatic conditions, inhabitants, customs, and even the history of numerous locations there. Her novel captures all these memories. The most part of the novel, *A Himalayan Love Story* takes place in Nainital. Nainital is a part of Gokhale's identity. As she acknowledges: "For me, Nainital is not a place on a map, it is not even a geographical location. It exists continually for me wherever I go. I live out a part of my life there wherever else in the world I might be" (229).

The locations of Nainital and the Jeolikote, which is located in the Himalayas and on the road heading to Nainital, are both well described in *A Himalayan Love Story*. The novel includes detailed descriptions of the houses, streets and bazaars. The first chapter of the book describes life in Jeolikote, where Parvati and her mother resided in two apartments perched above a kirana shop. Parvati describes the various trades practised by the local hill inhabitants. Strawberries, mulberries, and roasted corn on the cob were the staples of trade in Jeolikote, apart, of course, from the honey for which it was justly famous. It was not a prosperous town, nor a particularly interesting one. "Subjects of conversation were few and far between; nothing much happened except for yet another tourist or traveller taking sick because of the winding roads and puking uninhibitedly out of the window onto the body of a bus"(HLS 4).

Then there is the narration of road in Nainital that led to the place where the annual Nandashtami mela was held. Even the smallest details have been provided by Namita Gokhale to

show how much she adores Nainital and everything related to it. Mohan Mischief, Jeevan Jaundice, and Mukul all went to the mela. "We walked past the old English graveyard of St. Johns-in-the-Wilderness. with its brooding trees, with roots like talons, past the stable where houses sheltered restlessly under tattered blankets, down past the mosque and the police station to the temple" (HLS 83).

In *A Himalayan Love Story*, Namita Gokhale has depicted what is familiar to her—the various hues of nature over the seasons. She connects changes occurring in her characters' lives to various forces of nature. The first thing Parvati tells us is that she noticed her mother's face changing toward the conclusion of the long winter. Her skin tone returned to its previous state, and the small nest of wrinkles that had formed around her eyes also vanished. Seasonal changes have an effect on Parvati as well. With the arrival of spring, she no longer experienced the fear and dread she had over the long, chilly winter. She finds comfort in nature:

"The plum and apricot trees were in blossom, and the sky was a clear, triumphant blue. The days were getting warmer, there was something gentle and invigorating about the fragrant March breeze, and a part of the anxiety and dread that I carried like a secret burden seemed to be gradually disappearing with the spring"(HLS 13).

The monsoon caused the flowering of hydrangeas and tiger lilies, much as the arrival of spring caused the blossoming of plum and apricot trees. She was brought to Ramsay Hospital during that time period following Lalit's demise since she was carrying a child. Autumn came after the monsoon season, and this is when Parvati's problems really started. The season is vividly and obliquely described. It is nothing more than a memory of the past:

“It was when I returned to Wee Nooke that the troubles began. Although it was now autumn, the monsoon clouds had receded and the warm sun shone in a blue cloudless sky, the fog refused to go away. It crept about my forehead, black, smoky, acrid, creating a terrible weather and climate quite its own" (HLS 49).

The changes that occurred in Parvati's life, such as becoming a lunatic and sent to an asylum were foretold by the weather. But for Mukul, who returns to Nainital for a short stay, the natural world stands in for the warmth and comfort of home. He was completely familiar with the landscape as he was making his way to Nainital. Even the following scene could be predicted by him:

"There was a complete familiarity in the landscape, each scene reminding me of what was coming next. The sky was like a smudged grey watercolour. My eyes followed the inky cumulonimbus cloud formations towards the most unimaginable shades of green: the young green of the paddy shoots, the deeper colours of the mango trees, the tall lush grass. There was a fulfilment in the earth, in the flooded fields and cavorting parrots that communicated itself to me even though my tiredness of the day before. I put the window down and smelled the damp earth" (HLS 61).

When Mukul returned to the hills, he felt fulfilled, just like the earth eventually will. Gokhale has created the ideal representation of nature using colour. Further explanation obviously shows Mukul becoming sentimental at observing the many manifestations of nature. In order to fill the car's radiator, the driver stopped at Jeolikote, where Mukul discovered pure spring water gushing from a lion-headed spout. He inhaled the crisp scent of wet mud. He then came to a stop at the toll booth outside of Nainital. The entire chapter describing the nature reveals the delight of Mukul and nature. Dahlias and other flowers that are growing there are also made to sway by the soft air. In addition, the Monsoon streams were gleefully gurgling down the hill, and butterflies were flitting about:

"We stopped next at the toll station outside Nainital. Huge heads of dahlias nodded in the breeze. There were marigolds and cosmos and tiger lilies and other sorts of hill flowers the names of which I did not know. Monsoon streams gurgled down the hillside. Butterflies speckled the air" (HLS 72).

Gokhale's passion with hills is once again displayed in her next novel, *The Book of Shadows*, which is set in the Himalayan resort town of Ranikhet. It was a region created by the British as a hill station, a place for soldiers to relax and escape from the stifling heat of the plains. Ranikhet was hardly populated when missionary William James Cockerell and his wife arrived to start their mission there. At the place, there was not a single dwelling. There were trees all over the place. With the exception of a little area cleared on one side, William Cockerell writes: "With the exception of a little land cleared on one side, the country around was covered with forests of pine, oak and rhododendron, interspersed with meadows or 'bugyals' where the people of the valleys pastured their cattle" (TBS 37).

Rachita Tiwari sought shelter in a secluded house in the Himalayan foothills, after being attacked by her former lover's sister. She had visited this house frequently when she was a child. In the author's note at the opening of the novel, Namita Gokhale mentions that she had lived in the home that is mentioned in the book. She continues by making a statement about the home, saying,

"My husband and I lived in an old house in the hills. It was a house we both fell in love with. But we also felt that there was something strange some presence that was not entirely at peace with itself. I based my novel on that house. I didn't set out to do it. I didn't say, 'Okay, I've been to a haunted house so I'm going to write a ghost story.' It happened rather insidiously"(Namita Gokhale, at <http://www.lifepositive.com>).

Both the mansion and its surroundings were enigmatic. Rachita once strolled along the path that wound through the hill beneath the house. Rachita discovered a fascinating scene on the road with a small waterfall. When she saw the beauty of the place, she lost track of herself and her struggle in her quest for identity. Rachita was calmed by the surroundings, which caused her to lose herself. Describing the beauty of the place she says,

"There is a path that unfolds in the hills below the house that winds around until you reach the stream beside the fields, and then back to the house again. There is a spot in that walk that I have always felt is enchanted, privy to secrets, peopled by sprites or fairies or some such benevolent spirits. A copse of banj, of Himalayan oak, is clustered around a little waterfall that tumbles prettily to a clear pool surrounded by a heap of dolmen-like rocks. There was a forest of ferns around me, delicate cautious tendrils of the most heart-rending green. I sat down on a rock and contemplated the scene, forgetting for a while the confusing dilemmas of identity" (TBS 69).

The Bhairav Temple was another place that influenced Rachita. Even as a young child, it terrified her. Even the sun never strayed there since it was a forbidden place. It was intended for the most ferocious hill deity. On another of her walks, Rachita arrived at the temple and trembled as she entered. She describes her views:

"I found myself on the rocky path that leads to the Bhairav mandir dedicated to the fiercest of our hill deities. The temple is a forbidding place. It is situated upon a curve of the hill which the sun never visits. A jagged assembly of boulders line the way to the temple gates. A concatenation of crows is always squabbling there. Several steps up, on the spine of a ridge that straddles the mountainscape, in a direction obverse to the lay of the land, the Bhairav temple used to terrify me

even as a child. Now, once again, the hair on my arms stood on edge as I walked up the sombre path" (TBS 197).

Nature depictions abound in *The Book of Shadows*. With remarkable conciseness, the 15 hills, which goes from morning until sunset, and the changes in the scenery brought on by the changed season are depicted. Following an acid attack, Rachita has travelled to Ranikhet, a town at the foot of the Himalayas. She relies on nature for her power to survive. She was in a confused state of mind at the outset of the book, so she was not relishing in the beauty of nature. But at end of the novel the nature, however, is what nourishes her, teaches her life's lessons, keeps her alive, and gives her the urge to live. She begins the novel by describing the early hours of the day, with the sun peeking through the window and birds tweeting to announce the coming of morning. But she was not in the right state of mind to experience the morning splendour.

"I awake again as the first light of the morning creeps into the room. The dawn chorus heralds the arrival of day. First a single tinny-voiced bird twitters a brave but not entirely musical welcome to the Sun God. Gradually more voices enter the fray. It could sound lovely if one was in the right frame of mind, but my head is hurting" (TBS 32).

However, she finds satisfaction in the wonders of nature after drawing power from it and through self-realization. The fantastic description of the manifestation of nature's splendour is thus;

"This is the most beautiful time of the year in our hills. The leaves begin to change colour. And a shadow of red sits upon the hillside. The marigolds are out in full bloom, their rich smells satiate the senses. The tribulations of winter are just around the corner, yet the last snatches of sun drenched joy still saturate the earth. Marrows sit plumply upon the sloping roofs of village houses, sunning themselves, and tomatoes are dried and preserved for the sunless winter. Corn hangs by the

eaves of Lohaniju's cottage, as do garlands of bright red chillies. The Himalayas gleam brightly in the warm clear sunlight, and when the first snows fall in the high reaches of the mountains, powdering the peaks with an added glow, there is something breathe taking and stupendous in their beauty. It is a time to harvest, to conserve, to await a trial of strength with the elements. It is a time of joy and resolution" (TBS 218-219)

The missionary, William Cockerell, who constructed Rachita's home, believed that the harsh climate of the Indian subcontinent made it impossible for civilisation to advance steadily. When the first rains come, the vegetation is stimulated to grow because the summers are destructive to growth:

"In the searing summer months not a blade of green grass is to be seen, and the ground is scorched, scarred, and baked. When the first rains arrive, all nature is transformed. The parched earth gives way to the richest green. After the downpour the sun comes out in all its strength under the combined action of heat and moisture, every conceivable form of vegetation thrives vigorously, as, alas, does an infinite variety of pestilential insect life" (TBS 41).

William Cockerell also makes a comparison between the English and Indian autumn and claims that God is present in all nature. He claims:

"It was now the fair month of October, which in those hills is different from an English autumn. The copious monsoon rains had enriched and rejuvenated the soil, and a verdant green blanketed the hills. The heavens were deep and startlingly blue, a sort of rich cobalt colour unknown in England. Against this backdrop rose the noble snow-mountains of the Himalayan range, brilliant in the mellow sunshine; reminders to the human soul of the pervading presence of God" (TBS 48).

Namita Gokhale's fiction frequently references nature. In her novels, the natural and human worlds inevitably come into contact. She has carefully studied the numerous facets of nature and is able to accurately analyse how it affects the human psyche and way of life. Nature has a calming effect in addition to having an unsettling presence. Nature in all of its forms playing various roles in her writings. The protagonists are given solace by being removed from the world of sorrow and suffering, but at the same time being made aware of the depressing existential facts. The protagonist's inner world and the natural world outside are always in conversation with one another. Nature serves as a metaphor for both creation and destruction.

Thus it can be seen that Namita Gokhale cherishes nostalgic memories of the past. She exhibits a fine talent for conjuring up lovely word pictures in her thoughts. The descriptions of people, places, and environment are rich with small particulars. It demonstrates her keen sense of observation, memory, and retention. Having an intense desire to communicate and mastering the language to do so efficaciously and vigorously makes Namita Gokhale what Raja Rao refers to as a true "Upasaka": "Unless the author becomes an Upasaka' and enjoys himself in himself (which is 'Rasa') the eternality of the sound (Sabda) will not manifest itself and so you cannot communicate either and the word is nothing but a cacophony" (p.256)

She has written about the beautiful grandeur of the Himalayas as well as urban settings like Delhi and Mumbai in her works. From her childhood to her womanhood she carefully examined these locations all around her. She has imparted universal appeal to these places' scenery, landscapes, men and women, cultures, and traditions.

When discussing artists and the creative process, Henry James describes Namita Gokhale's exceptional perception as, "a kind of huge spider-web of the finest silken threads suspended in the

chamber of consciousness, and catching every air-borne particle in its tissue"(p.31). She provides vivid descriptions of people, places, and nature while subtly implying the peculiarities entangled.

Her first two novels reflect the urban setting which includes descriptions of workplaces, homes, streets, a cremation site, etc. While the hills are described in her other novels with their homes, streets, temples, strange spots, etc., she has also provided information about the residents of these locations. She provides details regarding their physical characteristics, attire, jewellery, and even behaviours. Then there is beautiful word art of the natural world, including hills, the sea, flowers, trees, the seasons, sunrises, eclipses, etc. Her novels' natural settings serve as both a backdrop and a central character. It can occasionally have an impact on how things turn out by affecting how people feel and how they behave.

In conclusion, Namita Gokhale's compositions are greatly influenced by the geographical environment that follows her wherever she goes. This paradigm views the individual as a component of the ecosystem and shifts the crucial attention away from social ties and toward natural ones. It places a high priority on the "literary sense of place," which is an essential statement of one's connection to or estrangement from a particular natural context rather than a setting. The writer has expressed an interest in environment, culture, and geography since the outset. An Eco critical perspective looks at how people interact with nature to understand how they relate to it because it supports the premise that nature permeates all aspects of life as a literary subject. Suresh Frederick is true when he states, "Eco criticism gives human beings a better understanding of nature" (134). Literary studies require Eco criticism because it is impossible to separate characters from nature, which they either groom disruptively or constructively.

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**PUBLIC OPINION TOWARDS JOB SATISFACTION AT THEIR WORKPLACE IN
CHENNAI**

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Abstract:

Job satisfaction is contentment in work, influencing motivation, productivity, and well-being. Satisfied employees are engaged, innovative, and committed, benefiting both individuals and organizations. Therefore it is important to analyze the level of satisfaction and keep the employees satisfied. The research method followed here is **empirical** research. A total of **224** samples have been collected out of which all samples have been collected through convenient sampling methods. The sample frame taken here is in **Chennai**. The independent variables are age, gender, educational qualification, occupation, monthly income and marital status. The dependent variables are factors that impact job satisfaction, best ways to improve job satisfaction and level of job satisfaction. The statistical tools used here are anova, chi-square and graphical representation. This research underscores the significance of financial and psychological factors in shaping job satisfaction. Respondents' recognition of the impact of remuneration on satisfaction reflects the practical importance of equitable compensation. Moreover, the acknowledgment of psychological attitude's role highlights the need for fostering a positive work environment to enhance satisfaction. There is an association between the monthly income and their need for job satisfaction. It is suggested that, employees can be made satisfied or contented with their job by providing the right environment to have a positive psychological attitude towards their job that will ultimately increase their commitment and dedication thus their job satisfaction.

Key words: Job satisfaction, contentment, motivation, psychological attitude and remuneration.

Introduction:

In the ever-evolving landscape of scientific management within industries, the quest for enhanced productivity has been a driving force, often met with various challenges and solutions. The pursuit of increased efficiency led to a pattern of incremental gains, but the relentless push for higher output sometimes resulted in worker exhaustion and dissatisfaction. This critical juncture marked the impetus for significant shifts in management strategies. The Hawthorne studies, a groundbreaking series of investigations, unveiled a pivotal revelation - the value of recognizing and valuing

employees' contributions beyond mere mechanistic roles. This discovery catalyzed a transformation in the understanding of job satisfaction and organizational productivity.

The implementation of bonuses, benefits, and Employee State Insurance (ESI) programs aimed to bolster the overall work environment. Central among the factors affecting job satisfaction is the level of remuneration. The provision of competitive compensation, coupled with adequate benefits and incentives, emerged as a bedrock for enhancing contentment among employees. Moreover, the intangible elements of motivation and recognition began to play a pivotal role in shaping job satisfaction, as did considerations of job safety and security, which profoundly impacted psychological attitudes within the workforce.

In contemporary times, notable trends are reshaping the landscape of job satisfaction. Emphasis on promoting work-life balance has gained momentum, with rewards extending beyond monetary gains. Remote work arrangements, once considered novel, have become integral to job satisfaction. Simultaneously, the practice of moonlighting has emerged as a trend, allowing individuals to diversify their skills and income streams. A key concern is mental well-being, with organizations increasingly recognizing its centrality in fostering a satisfied and productive workforce.

In a global context, intriguing variations in job satisfaction across different countries come to the fore. India, for instance, boasts relatively high levels of job satisfaction, suggesting a conducive work environment. In stark contrast, countries like Japan have faced challenges stemming from a demanding work culture, resulting in lower levels of job satisfaction. Meanwhile, Mexico, Canada, and the United States exhibit a diverse range of experiences that can be attributed to a multitude of factors, including economic disparities, societal norms, and labor policies. This intricate tapestry of global experiences underscores the intricate relationship between job satisfaction and a myriad of cultural, economic, and policy-driven influences.

Objectives:

- To study public opinion on job satisfaction
- To find the factors that impact job satisfaction
- To suggest the best way to improve job satisfaction

Literature review:

1. **Paolo Ghinetti et al. (2007)** studied the difference in satisfaction among public and private employees in Italy. The research was based on survey data of 6 job attributes. It was found that private employees evaluate job satisfaction with job security and consideration by colleagues and safety.
2. **G. Haile et al. (2009)** studied to analyze the workplace job satisfaction in Britain. An empirical study was conducted based on surveys of personnels and economics. It was found that the public sector was satisfied with their job except with pay.
3. **Madhu S. Mohanty et al. (2016)** researched to study the relationship between positive attitude and job satisfaction in US. The study, based on longitudinal data sets from US, claims that worker's satisfaction at workplace depends on psychological attitude
4. **M. Ashraf et al. (2019)** researched the role of work atmosphere in relationship between supervisor cooperation, career growth and job satisfaction. 325 samples were collected by survey instrument and analysed. It was concluded that these factors pave a positive path value towards job satisfaction.
5. **A. Susanty et al. (2013)** researched the effect of attitude towards work, organizational commitment and job satisfaction. The sample size was 200 was analyzed and the results suggest that attitude towards co-workers have a positive impact on job satisfaction but it is not a significant effect on employee performance.
6. **Mahmoud et al., (2019)**. researched the hr practices in mediating job satisfaction. The results are based on 263 samples of banking employees. The findings suggest that remuneration impacts job satisfaction and employee commitment positively.
7. **Jalal et al (2021)** analyzed the job satisfaction based on remuneration in work environment. The study was based on 231 private employees and correlations were used to analyze the data. It was found that remuneration and psychological rewards have significant positive impact on performance

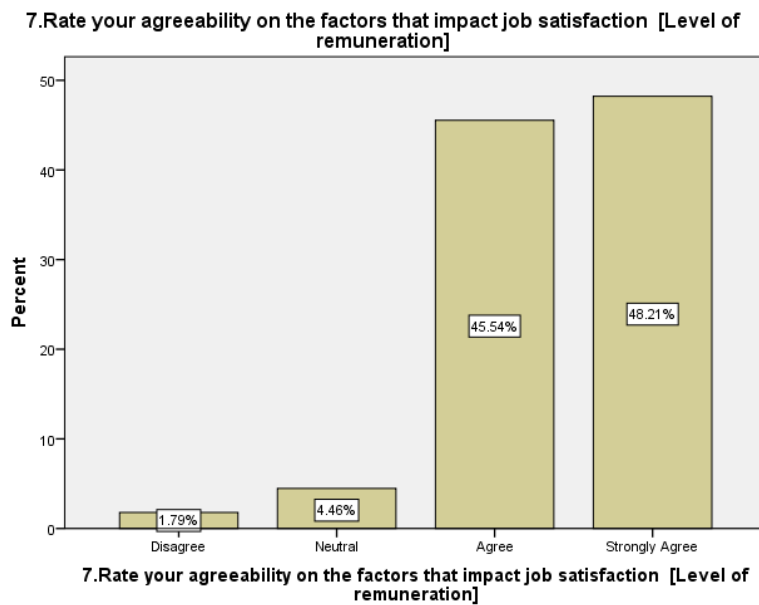
Methodology:

The research method followed here is **descriptive** research. A total of **224** samples have been collected out of which all samples have been collected through convenient sampling methods. The

sample frame taken here is in **Chennai**. The independent variables are age, gender, educational qualification, occupation ,monthly income and marital status. The dependent variables are factors that impact job satisfaction,bestways to improve job satisfaction and level of job satisfaction .The statistical tools used here are anova ,chi-square and graphical representation.

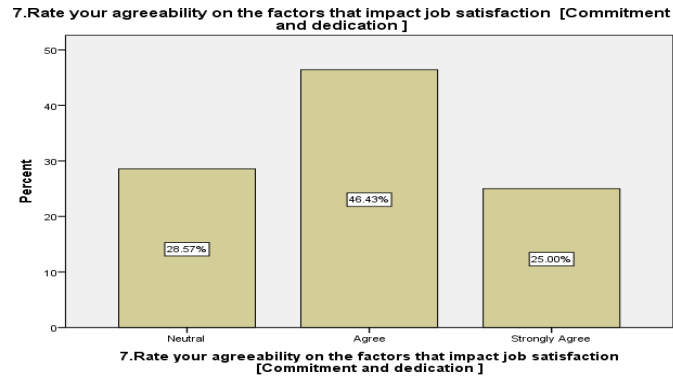
Analysis:

Figure 1



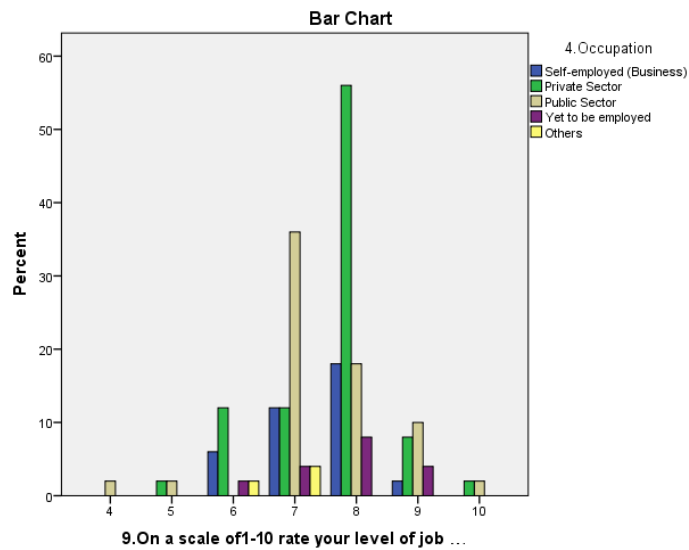
Legend: Fig 1 shows respondents agreeability on “level of remuneration impacts job satisfaction

Figure 2



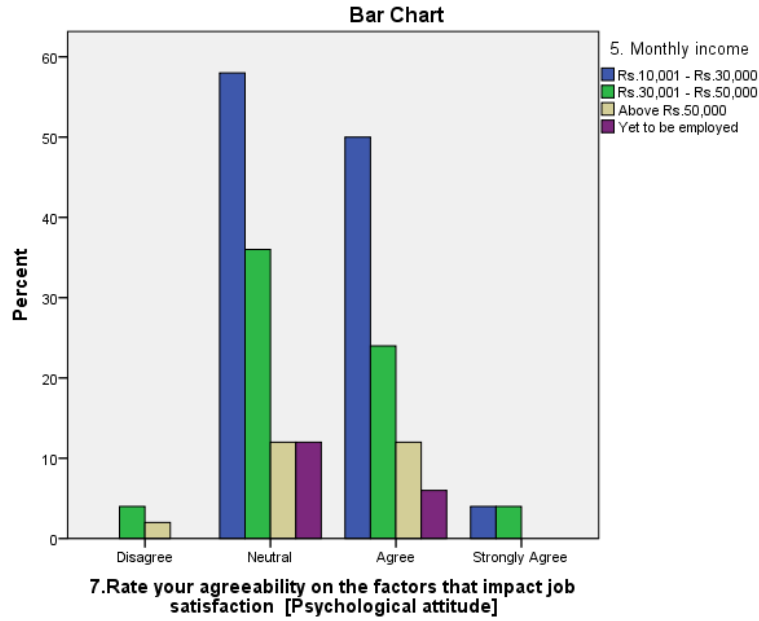
Legend: Fig 2 shows respondents agreeability on commitment and dedication as a factor that impacts job satisfaction

Figure 3



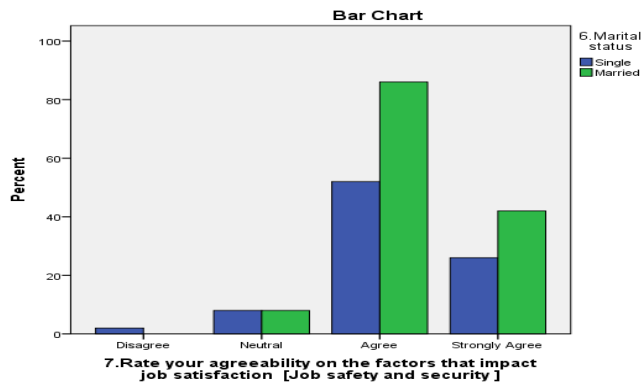
Legend: Fig 3 shows respondents level of job satisfaction varying with occupation

Figure 4



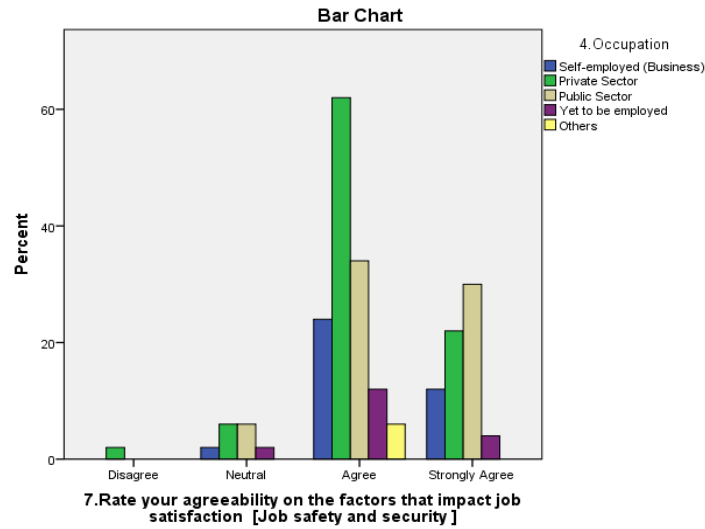
Legend:Fig 4 shows respondents opinion on psychological attitude varying with monthly income

Figure 5



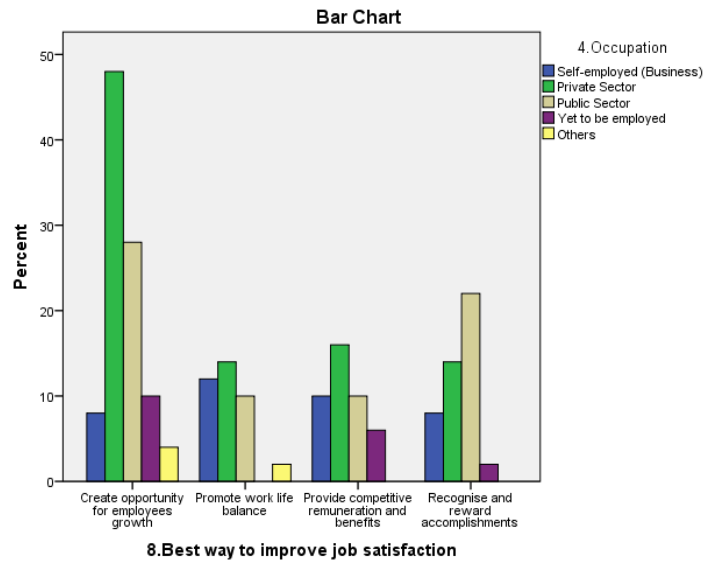
Legend:Fig 5 shows respondents opinion on job safety and security varying with occupation

Figure 6



Legend: Fig 6 shows respondents opinion on job safety and security varying with occupation

Figure 7



Legend: Fig 7 shows respondents opinion on ways to improve job satisfaction varying with occupation

Table 1:

Null Hypothesis: There is no association between best way to improve job satisfaction and monthly income

Alternate Hypothesis: There is association between best way to improve job satisfaction and monthly income

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	63.693 ^a	9	.000
Likelihood Ratio	60.357	9	.000
N of Valid Cases	224		

a. 5 cells (31.3%) have expected count less than 5. The minimum expected count is 3.05.

Interpretation:The calculated p value is 0.000. Since P value < 0.05, null hypothesis is rejected at 5% level of Significance. So there is an association between best way to improve job satisfaction and monthly income

Table 2

Null Hypothesis: There is no significant difference in opinion on job safety and security and occupation

Alternate Hypothesis: There is a significant difference in opinion on job safety and security and occupation

ANOVA

7. Rate your agreeability on the factors that impact job satisfaction [Job safety and security]

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	5.094	1	5.094	14.760	.000
Within Groups	76.620	222	.345		
Total	81.714	223			

Interpretation:The calculated p value is 0.000. Since P value < 0.05, null hypothesis is rejected. So there is a significant difference in opinion on job safety and security and occupation

Result: **Figure 1** reveals that 48.21% of respondents strongly agree and 45% agree that the level of remuneration significantly affects job satisfaction. **Figure 2** shows that 46% of respondents agree and 28% are neutral towards commitment and dedication. **Figure 3** indicates that individuals in the private sector and those who are self-employed report higher satisfaction levels compared to those in the public sector. **Figure 4** shows that employees earning around 10k rs are neutral, while a majority of those earning above 50k rs lean towards agreement on psychological attitudes as a factor of job satisfaction. **Figure 5**, married respondents show higher agreement levels on job safety and security compared to single respondents. **Figure 6** it is known that more respondents from the public sector strongly agree on job safety and security as a factor of job satisfaction. It is known from **figure 7** that majority of the private sector respondents want opportunities to grow and self employed respondents want better work life balance

Discussions:

In **Figure 1**, 48.21% of respondents strongly agree and 45% agree that remuneration impacts job satisfaction. This could be because the significance of income in job satisfaction could stem from valuing financial well-being and happiness correlation. **Figure 2** indicates 46% agreement and 28% neutrality towards commitment and dedication, possibly due to a lack of connection and ownership in their roles and a sense of belonging in the organisation. In **Figure 3** it is clear that greater job satisfaction in private and self-employed sectors compared to the public sector this could be attributed to work flexibility. **Figure 4** shows neutrality among 10,000rs earners, while those above 50k RS lean towards disagreement, implying a psychological attitude of desiring more money and a better economy or wealth. In **Figure 5**, married respondents express more agreement on job safety, reflecting their understanding and experience. **Figure 6** there is strong agreement on job safety and security as factor of job satisfaction, in the public sector could arise from the perceived security provided by government jobs. It is known from **figure 7** that majority of the private sector respondents want opportunities to grow and self employed respondents want better work life balance this could be because private sectors might be exploited whereas business people spend most of time on work and regret doing that job.

Conclusion:

Job satisfaction is contentment in work, influencing motivation, productivity, and well-being. Satisfied employees are engaged, innovative, and committed, benefiting both individuals and organizations. The findings suggest that a substantial percentage of respondents acknowledge the impact of psychological attitude on job satisfaction, highlighting the importance of a positive mindset. Additionally, the agreement among respondents regarding the significance of remuneration on job satisfaction underscores the role of financial aspects in influencing contentment. Respondents' opinions also reflect the value they place on fair and competitive compensation, aligning with the notion that equitable payment is closely linked to job satisfaction. Furthermore, the exploration of diverse demographic variables demonstrates the multifaceted nature of job satisfaction. Marital status, occupation, and income levels all contribute to varying degrees of job satisfaction, indicating the complex interplay of personal and professional factors. The rejection of null hypotheses in statistical tests highlights the associations between different variables, such as monthly income and suggestions for improving job satisfaction, as well as the interplay between occupation and opinions on job safety and security. These collective insights not only enrich our understanding of job satisfaction but also provide valuable considerations for employers and organizations seeking to create fulfilling and engaging work environments.

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Crystal Growth, Quantum Chemical Calculation and Molecular Docking Studies of 3-(2-(Piperidin-1-yl)Acetamido) Benzofuran-2-Carboxamide.

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Abstract

3-(2-(Piperidin-1-yl) Acetamido) Benzofuran-2-Carboxamide (3PAB2C), is a Benzo furan derivative. As Benzo furan has several pharmacological activities, in the present work, 3PAB2C has been synthesized by slow evaporation method. To investigate and confirm the structure of 3PAB2C X- ray crystallography and spectroscopic methods like NMR, FTIR and UV – Vis spectra have been recorded. Finally, molecular docking studies of 3PAB2C was carried out against COVID-19 spike and confirmed with theoretical method using Density functional theory (DFT) calculations.

Key words: 3-(2-(Piperidin-1-yl) Acetamido) Benzofuran-2-Carboxamide, NMR, FTIR, DFT.

Introduction

3-(2-(Piperidin-1-yl) Acetamido) Benzofuran-2-Carboxamide (3PAB2C) is a Benzofuran derivative. 3PAB2C with an aromatic ring structure is a heterocyclic analog of naphthalene. As Benzofuran containing compounds exhibit various medicinal and non-drug applications focus on the synthesis and evaluation of pharmacological activities of various benzofuran coupled with heterocyclic moieties such as pyrazole, thiazole, oxadiazole, thiazolidinone [1] has been carried out. Literature survey reveals that Benzofuran derivatives show pharmacological activities like antimicrobial, anti-inflammatory, antidepressant, antitumor, analgesic and anticonvulsant [2-9]. This interesting information leads to the present investigation. Therefore 3PAB2C is synthesized by slow evaporation method and characterized using various spectroscopic techniques. Molecular docking

study against COVID-19 disease is performed and Density Functional Theory calculations were used to support the molecular docking results.

Experimental

3PAB2C was synthesized at Biochemie Innovations Lab, Tindivanam. The pure sample was used as such for the spectral measurements. FTIR spectrum of 3PAB2C has been recorded in the range 3500 – 350 cm⁻¹ using BRUKER IFS Spectrometer and UV – Vis spectrum in the range of 200-450 nm using UV Visible Spectrophotometer at Biochemie Lab. ¹H NMR and ¹³C NMR was recorded using Lab Mann Bruker at School of Chemistry, Madurai Kamaraj University.

Computational details

All the theoretical computations were performed at B3LYP level on a personal computer using Gaussian 09W program package [10]. The geometry optimization was carried out using the initial geometry generated at DFT level methods adopting 6-31 G (d,p) basis set.

Crystal Growth

3PAB2C Crystal was synthesized in four steps. 2-(cyanomethoxy) benzonitrile was obtained from stirred solution of 2-hydroxy benzonitrile (0.083 mol) in DMF (50 mL) to which potassium carbonate (0.166 mol) and 2-chloro acetonitrile (0.101 mol) were added at room temperature. The reaction mixture was refluxed to 80 °C for 3 hours and was poured into ice-cold water and filtered, then washed with hexane and dried.

(2-cyanomethoxy) benzonitrile (0.0632 mol) was mixed with ethanol (100 mL), KOH (0.178 mol) and was refluxed to 75 °C for 3 hours, then poured into the ice-cold water, filtered to obtain 3-amino-1-benzofuran-2-carboxamide.

To 3-amino-1-benzofuran-2-carboxamide (0.0227mol) in dichloromethane (100 mL), triethylamine (0.0646 mol) was added at 0 to 5 °C. To this mixture chloroacetyl chloride (0.0267 mol) was added drop wise over 5 min. After completion of addition, the reaction was stirred at ambient temperature for 4 hours. Then the reaction mixture was diluted, washed to synthesis 3-(2-(substitutedamino) acetamido) benzofuran-2-carboxamide.

Finally, 3-(2-(piperidin-1-yl) acetamido) benzofuran-2-carboxamide was synthesized by adding 3-[(chloroacetyl) amino]-1-benzofuran-2-carboxamide (0.0012 mol) in dichloromethane (10 mL) with triethylamine (0.0024 mol) and piperidine (0.0014 mol). After 6 hours, the reaction mixture was diluted with dichloromethane (50 mL), washed with water and brine (25 mL) then dried over anhydrous sodium sulphate, filtered and evaporated. 3 Dimensional structure of 3PAB2C is given in Fig.1.



Fig 1. 3D structure of 3PAB2C

Result and discussion

The structure of 3PAB2C was confirmed by X-Ray crystallography method. The ORTEP diagram is given in Fig 2. The geometrical parameters for the crystal like bond length, bond angle and torsional angle are given in Table 1. The geometrical parameters are in acceptable range [11].

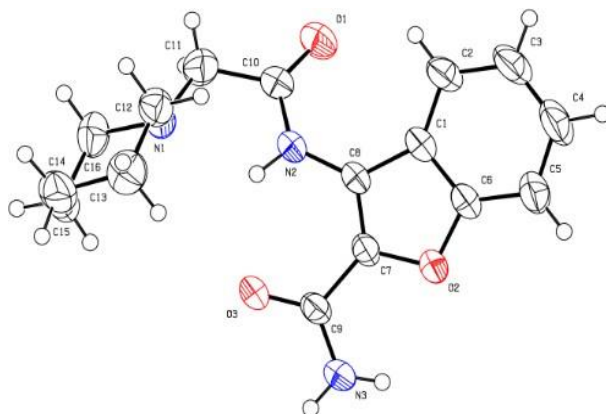


Fig 2. ORTEP diagram of 3PAB2C

Table 1: Geometry of 3PAB2C

S. No.	Bond atoms	Bond length (Å)	Bond angle Atoms	Bond angle	Dihedral angle atoms	Dihedral angles
1	C(22)-H(41)	1.098	H(41)-N(35)- H(40)	119.955	C(12)-C(1)-C(2)-C(4)	177.769
2	C(22)-H(40)	1.097	H(41)-N(35)- C(13)	119.594	C(12)-C(1)-C(2)-H(3)	-2.128
3	C(21)-H(39)	1.096	H(40)-N(35) - (13)	116.675	C(10)-C(1)-C(2)-C(4)	1.370
4	C(21)-H(38)	1.097	C(30)-C(27)-H(29)	109.311	C(10)-C(1)-C(2)-H(3)	-178.528
5	C(20)-H(37)	1.097	C(30)-C(27)-H(28)	109.428	C(12)-C(1)-C(10)-C(8)	-178.785
6	C(20)-H(36)	1.095	C(30)-C(27)-C(24)	111.264	C(12)-C(1)-C(10)-O(37)	-0.626
7	C(19)-H(35)	1.096	H(29)-C(27)-H(28)	107.966	C(2)-C(1)-C(10)-C(8)	-1.366
8	C(19)-H(34)	1.097	H(29)-C(27)-C(24)	109.366	C(2)-C(1)-C(10)-O(37)	176.794
9	C(18)-H(33)	1.098	H(28)-C(27)-C(24)	109.442	C(10)-C(1)-C(12)-C(11)	1.335

10	C(18)-H(32)	1.096	C(27)-C(24)-H(26)	109.547	C(10)-C(1)-C(12)-N(34)	177.209
11	C(16)-H(31)	1.096	C(27)-C(24)-H(25)	109.639	C(2)-C(1)-C(12)-C(11)	-175.408
12	C(16)-H(30)	1.097	C(27)-C(24)-C(21)	110.125	C(2)-C(1)-C(12)-N(34)	0.466
13	N(13)-H(29)	1.018	H(26)-C(24)-H(25)	108.147	C(11)-C(13)-N(35)-H(40)	-173.626
14	N(13)-H(28)	1.010	H(26)-C(24)-C(21)	109.667	C(11)-C(13)-N(35)-H(41)	-15.508
15	N(10)-H(27)	1.019	H(25)-C(24)-C(21)	109.685	O(38)-C(13)-N(35)-H(40)	7.557
16	C(6)-H(26)	1.086	C(24)-C(21)-H(23)	109.558	O(38)-C(13)-N(35)-H(41)	165.675
17	C(3)-H(25)	1.083	C(24)-C(21)-H(22)	109.547	C(21)-C(24)-C(27)-C(30)	-53.648
18	C(2)-H(24)	1.088	C(24)-C(21)-C(18)	110.563	C(21)-C(24)-C(27)-H(28)	-174.704
19	C(1)-H(23)	1.088	H(23)-C(21)-H(22)	108.113	C(21)-C(24)-C(27)-H(29)	67.210
20	N(17)-C(22)	1.475	H(23)-C(21)-C(18)	109.520	H(25)-C(24)-C(27)-C(30)	-174.424
21	C(21)-C(22)	1.528	H(22)-C(21)-C(18)	109.499	H(25)-C(24)-C(27)-H(28)	64.520
22	C(20)-C(21)	1.523	N(33)-C(30)-H(32)	109.727	H(25)-C(24)-C(27)-H(29)	-53.565
23	C(19)-C(20)	1.524	N(33)-C(30)-H(31)	109.682	H(26)-C(24)-C(27)-C(30)	67.046
24	C(18)-C(19)	1.530	N(33)-C(30)-C(27)	109.897	H(26)-C(24)-C(27)-H(28)	-54.010
25	N(17)-C(18)	1.478	H(32)-C(30)-H(31)	108.141	H(26)-C(24)-C(27)-H(29)	-172.096
26	C(8)-C(9)	1.387	H(32)-C(30)-C(27)	109.666	C(24)-C(27)-C(30)-N(33)	57.096
27	C(5)-C(9)	1.425	H(31)-C(30)-C(27)	109.701	C(24)-C(27)-C(30)-H(31)	177.763
28	C(4)-C(5)	1.387	N(33)-C(18)-C(21)	110.127	C(24)-C(27)-C(30)-H(32)	-63.605
29	C(6)-C(5)	1.408	N(33)-C(18)-H(20)	109.660	H(28)-C(27)-C(30)-N(33)	178.160
30	C(1)-C(6)	1.402	N(33)-C(18)-H(19)	109.601	H(28)-C(27)-C(30)-H(31)	-61.172
31	C(2)-C(1)	1.397	C(21)-C(18)-H(20)	109.584	H(28)-C(27)-C(30)-H(32)	57.459
32	C(3)-C(2)	1.398	C(21)-C(18)-H(19)	109.640	H(29)-C(27)-C(30)-N(33)	-63.795
33	C(4)-C(3)	1.392	H(20)-C(18)-H(19)	108.199	H(29)-C(27)-C(30)-H(31)	56.873

34	O(7)-C(4)	1.357	C(30)-N(33)-C(18)	110.675	H(29)-C(27)-C(30)-H(32)	175.504
35	C(8)-O(7)	1.374	C(30)-N(33)-C(15)	114.400	C(18)-C(21)-C(24)-C(27)	53.744
36	C(16)-N(17)	1.484	C(18)-N(33)-C(15)	113.604	C(18)-C(21)-C(24)-H(25)	174.492
37	C(11)-C(16)	1.529	N(33)-C(15)-H(17)	109.154	C(18)-C(21)-C(24)-H(26)	-66.879
38	C(11)-O(15)	1.225	N(33)-C(15)-H(16)	109.135	H(22)-C(21)-C(24)-C(27)	174.507
39	C(12)-O(14)	1.229	N(33)-C(15)-C(14)	112.513	H(22)-C(21)-C(24)-H(25)	-64.745
40	C(12)-N(13)	1.368	H(17)-C(15)-H(16)	107.764	H(22)-C(21)-C(24)-H(26)	53.884
41	C(8)-C(12)	1.446	H(17)-C(15)-C(14)	109.065	H(23)-C(21)-C(24)-C(27)	-67.053
42	N(10)-C(11)	1.384	H(16)-C(15)-C(14)	109.096	H(23)-C(21)-C(24)-H(25)	53.695
43	C(9)-N(10)	1.362	O(36)-C(14)-N(34)	125.749	H(23)-C(21)-C(24)-H(26)	172.324
44			O(36)-C(14)-C(15)	121.426	N(33)-C(18)-C(21)-C(24)	-57.702
45			N(34)-C(14)-C(15)	112.812	N(33)-C(18)-C(21)-H(22)	-178.494
46			H(39)-N(34)-C(14)	114.151	N(33)-C(18)-C(21)-H(23)	63.118
47			H(39)-N(34)-C(12)	116.446	H(19)-C(18)-C(21)-C(24)	62.972
48			C(14)-N(34)-C(12)	128.536	H(19)-C(18)-C(21)-H(22)	-57.820
49			O(38)-C(13)-N(35)	124.136	H(19)-C(18)-C(21)-H(23)	-176.209
50			O(38)-C(13)-C(11)	118.254	H(20)-C(18)-C(21)-C(24)	-178.412
51			N(35)-C(13)-C(11)	117.599	H(20)-C(18)-C(21)-H(22)	60.796
52			O(37)-C(11)-C(13)	119.230	H(20)-C(18)-C(21)-H(23)	-57.593
53			O(37)-C(11)-C(12)	111.622	C(27)-C(30)-N(33)-C(15)	169.241
54			C(13)-C(11)-C(12)	129.109	C(27)-C(30)-N(33)-C(18)	-60.883
55			C(11)-O(37)-C(10)	105.069	H(31)-C(30)-N(33)-C(15)	48.561
56			N(34)-C(12)-C(11)	123.327	H(31)-C(30)-N(33)-C(18)	178.438
57			N(34)-C(12)-C(1)	129.654	H(32)-C(30)-N(33)-C(15)	-70.095

58			C(11)-C(12)-C(1)	106.887	H(32)-C(30)-N(33)-C(18)	59.781
59			O(37)-C(10)-C(8)	124.708	C(21)-C(18)-N(33)-C(15)	-168.173
60			O(37)-C(10)-C(1)	111.597	C(21)-C(18)-N(33)-C(30)	61.529
61			C(8)-C(10)-C(1)	123.667	H(19)-C(18)-N(33)-C(15)	71.130
62			C(10)-C(8)-H(9)	122.165	H(19)-C(18)-N(33)-C(30)	-59.168
63			C(10)-C(8)-C(6)	115.781	H(20)-C(18)-N(33)-C(15)	-47.508
64			H(9)-C(8)-C(6)	122.054	H(20)-C(18)-N(33)-C(30)	-177.806
65			C(8)-C(6)-H(7)	118.991	C(14)-C(15)-N(33)-C(18)	84.663
66			C(8)-C(6)-C(4)	121.959	C(14)-C(15)-N(33)-C(30)	-146.925
67			H(7)-C(6)-C(4)	119.050	H(16)-C(15)-N(33)-C(18)	-36.580
68			C(6)-C(4)-H(5)	119.235	H(16)-C(15)-N(33)-C(30)	91.833
69			C(6)-C(4)-C(2)	121.608	H(17)-C(15)-N(33)-C(18)	-154.121
70			H(5)-C(4)-C(2)	119.158	H(17)-C(15)-N(33)-C(30)	-25.708
71			C(4)-C(2)-H(3)	121.023	N(34)-C(14)-C(15)-N(33)	6.113
72			C(4)-C(2)-C(1)	117.967	N(34)-C(14)-C(15)-H(16)	127.377
73			H(3)-C(2)-C(1)	121.009	N(34)-C(14)-C(15)-H(17)	-115.155
74			C(12)-C(1)-C(10)	104.801	O(36)-C(14)-C(15)-N(33)	-175.122
75			C(12)-C(1)-C(2)	136.125	O(36)-C(14)-C(15)-H(16)	-53.857
76			C(10)-C(1)-C(2)	119.003	O(36)-C(14)-C(15)-H(17)	63.611
77					C(15)-C(14)-N(34)-C(12)	-179.736
78					C(15)-C(14)-N(34)-H(39)	11.428
79					O(36)-C(14)-N(34)-C(12)	1.562
80					O(36)-C(14)-N(34)-H(39)	-167.274
81					C(11)-C(12)-N(34)-C(14)	-151.449

82					C(11)-C(12)-N(34)-H(39)	17.170
83					C(1)-C(12)-N(34)-C(14)	33.277
84					C(1)-C(12)-N(34)-H(39)	-158.103
85					O(37)-C(11)-C(13)-N(35)	-12.001
86					O(37)-C(11)-C(13)-O(38)	166.887
87					C(12)-C(11)-C(13)-N(35)	170.488
88					C(12)-C(11)-C(13)-O(38)	-10.624
89					O(37)-C(11)-C(12)-N(34)	-177.815
90					O(37)-C(11)-C(12)-C(1)	-1.617
91					C(13)-C(11)-C(12)-N(34)	-0.152
92					C(13)-C(11)-C(12)-C(1)	176.047
93					C(12)-C(11)-O(37)-C(10)	1.219
94					C(13)-C(11)-O(37)-C(10)	-176.704
95					C(8)-C(10)-O(37)-C(11)	177.829
96					C(1)-C(10)-O(37)-C(11)	-0.308
97					C(6)-C(8)-C(10)-O(37)	-177.476
98					C(6)-C(8)-C(10)-C(1)	0.442
99					H(9)-C(8)-C(10)-O(37)	2.430
100					H(9)-C(8)-C(10)-C(1)	-179.652
101					C(4)-C(6)-C(8)-C(10)	0.438
102					C(4)-C(6)-C(8)-H(9)	-179.469
103					H(7)-C(6)-C(8)-C(10)	-179.556
104					H(7)-C(6)-C(8)-H(9)	0.537
105					C(2)-C(4)-C(6)-C(8)	-0.378

106					C(2)-C(4)-C(6)-H(7)	179.616
107					H(5)-C(4)-C(6)-C(8)	179.639
108					H(5)-C(4)-C(6)-H(7)	-0.367
109					H(3)-C(2)-C(4)-C(6)	179.346
110					H(3)-C(2)-C(4)-H(5)	-0.671
111					C(1)-C(2)-C(4)-C(6)	-0.552
112					C(1)-C(2)-C(4)-H(5)	179.431

The 3PAB2C was also characterized by ¹H NMR, ¹³C NMR, FTIR and UV-Vis spectral methods Fig 4-7. The appearance of amide NH peak around 10 ppm and the broad singlet around 5.5 ppm & 6.0 ppm indicate the presence of N-substituted amide and carboxamide unit. The two peaks appearing at around 160 ppm in ¹³C NMR are due to the two carbonyl groups. In FTIR spectrum the N-H stretching vibrations at 3438cm⁻¹ and 3336 cm⁻¹ confirms the existence of amide group [12]. The aromatic C-H stretching vibrations generally appear in the range 3000 – 3250cm⁻¹ in substituted benzenes [13]. In the present case, the vibration at 3223 cm⁻¹ is assigned to CH asymmetric stretching. The vibration at 1664 cm⁻¹ confirms the presence of carbonyl group.

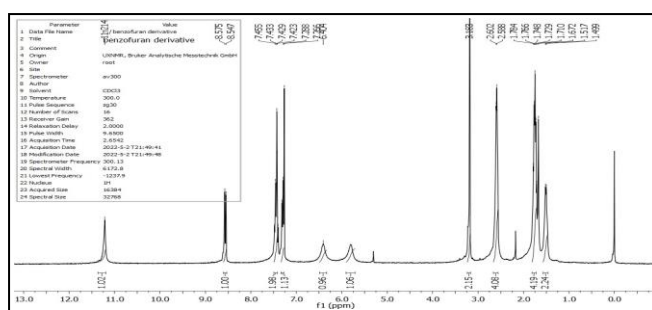


Fig 4. ¹H NMR spectrum of 3PAB2C

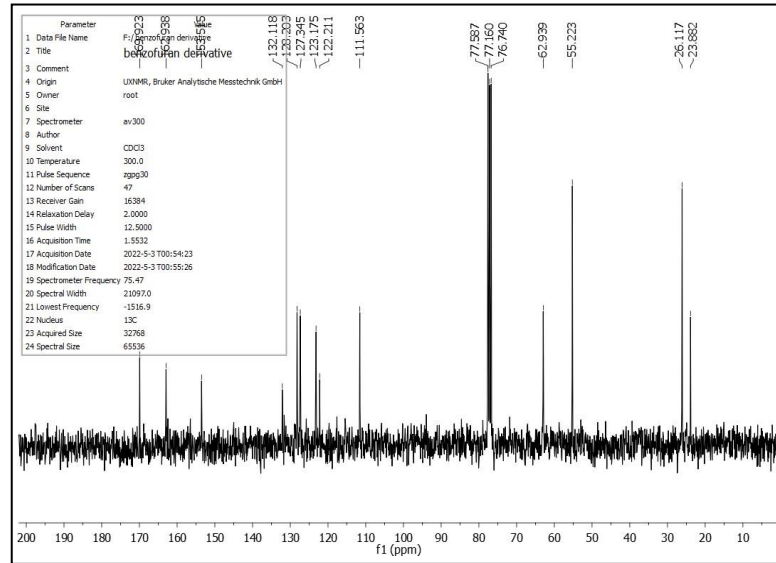


Fig 5. ¹³C NMR spectrum of 3PAB2C

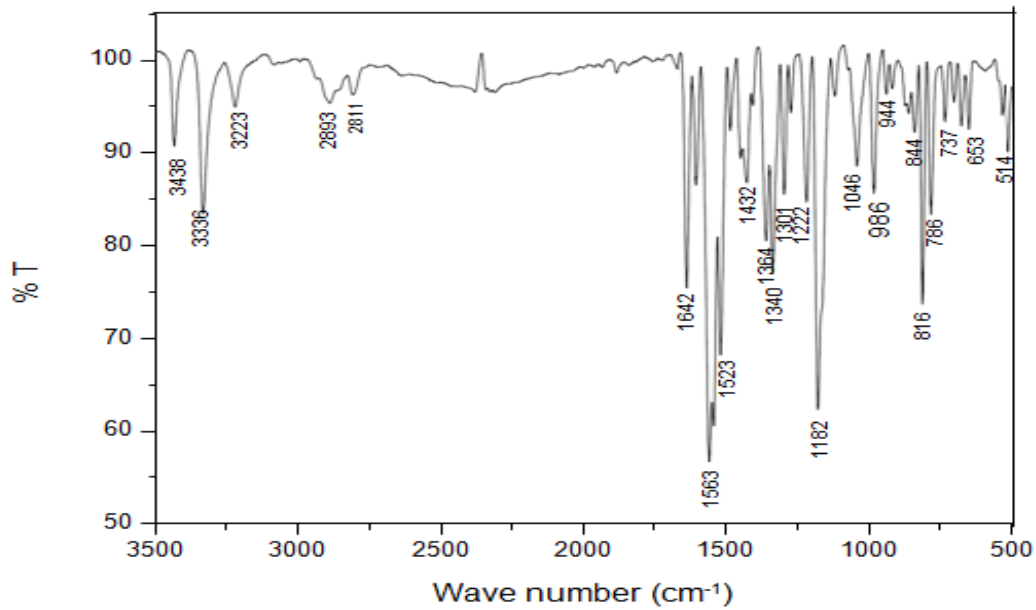


Fig 6: FT-IR spectrum of 3PAB2C

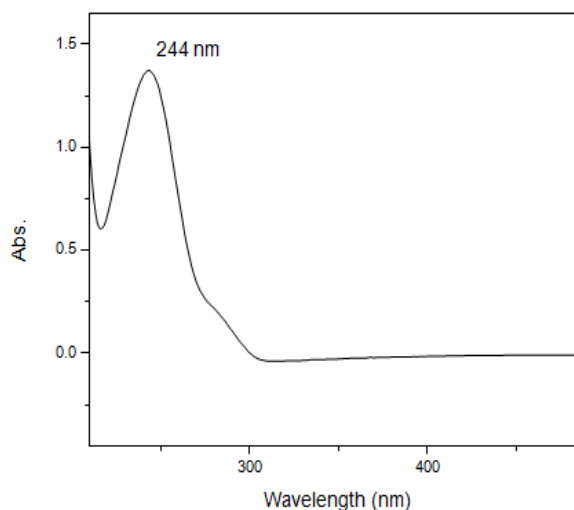


Fig 7. UV-Visible spectrum of 3PAB2C

Molecular Docking Studies

Molecular docking, frequently used in pharmaceutical industries to predict the binding conformation of small molecules to the applicable target binding site to develop new drug. The 3D structure of the Sars-Cov-2 spike protease (6m0j.pdb) was downloaded from the protein data bank. The molecular docking and visualization using discovery studio are performed as followed by Sribalan et al [14]. The 3PAB2C was used to perform for COVID-19 spike protease (6m0j.pdb) Molecular docking was performed using the Auto-Dock Tool (1.5.6). The 3D structure was optimized using Gaussian 09W. All avoidable water and ligand were removed from the enzyme and polar hydrogen was added to the enzyme. The target was generated as a PDBQT format. PDBQT file of the ligands also generated and performed. The grid box size is fixed as 60 x 60 x 60 points in X, Y, and Z directions. Similarly, the grid space is fixed as 0.375 Å and ten runs were created by using Lamarckian genetic algorithm searches. The calculated bonding energy and inhibition constant is found to be -4.47 kcal/mol and 533.42 μM respectively. The compound showed 2 hydrogen

bonding interactions which form the conventional hydrogen bonding interaction with PHE338 and GLY339 respectively. The calculated hydrogen bonding distance is 3.26Å and 2.87Å. The molecular docking result concludes that the 3PAB2C may cure the COVID-19 disease. The docking interaction results are representing in Table 2. The docking interacted image is represented in Fig 8.

Table 2: Docking of 3PAB2C with 6m0j.pdb (Spike protease of Sars-Cov-2)

Sample code	Binding energy kcal/mol	Inhibition constant	No of hydrogen bonding	Hydrogen bonding amino acid/residue
1	-4.47 kcal/mol	533.42 μM	2	PHE338(3.26Å) conventional hydrogen bonding interaction GLY339(2.87Å) conventional hydrogen bonding interaction

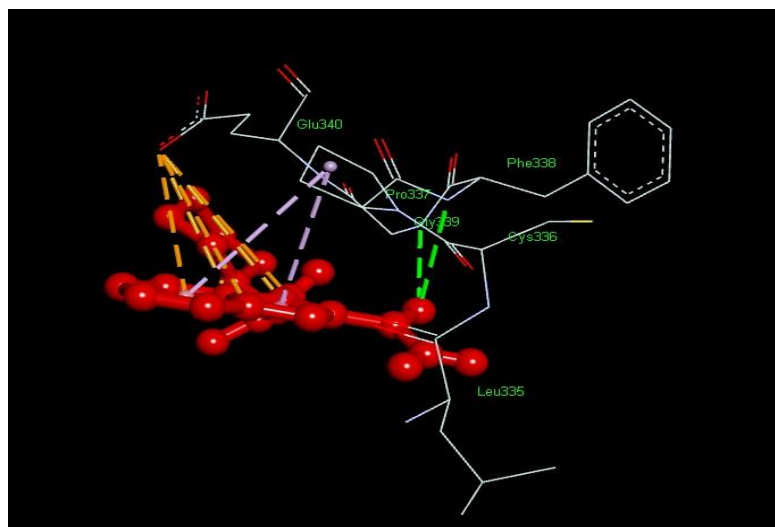


Fig 8: Interaction of 3PAB2C with 6m0j.pdb

DFT Studies

The DFT studies were performed to support the molecular docking studies. The Highest occupied molecular orbital (HOMO) and lowest unoccupied molecular orbital (LUMO) clearly shows that benzofuran has highest electron cloud. Thus, the benzofuran moiety is responsible for interaction with proteins. The Molecular Electrostatic Potential (MEP) clearly shows that the negative region presents in benzofuran oxygen and carboxamide oxygen is responsible for hydrogen bonding interactions. The Mulliken charge analysis shows that the nitrogen and oxygen has highest negative charge thus responsible for hydrogen bonding interactions. The Optimized structure, HOMO, LUMO, MEP and Mulliken charge information are represented the given fig 9-14.

ig 9. Optimized structure of 3PAB2C

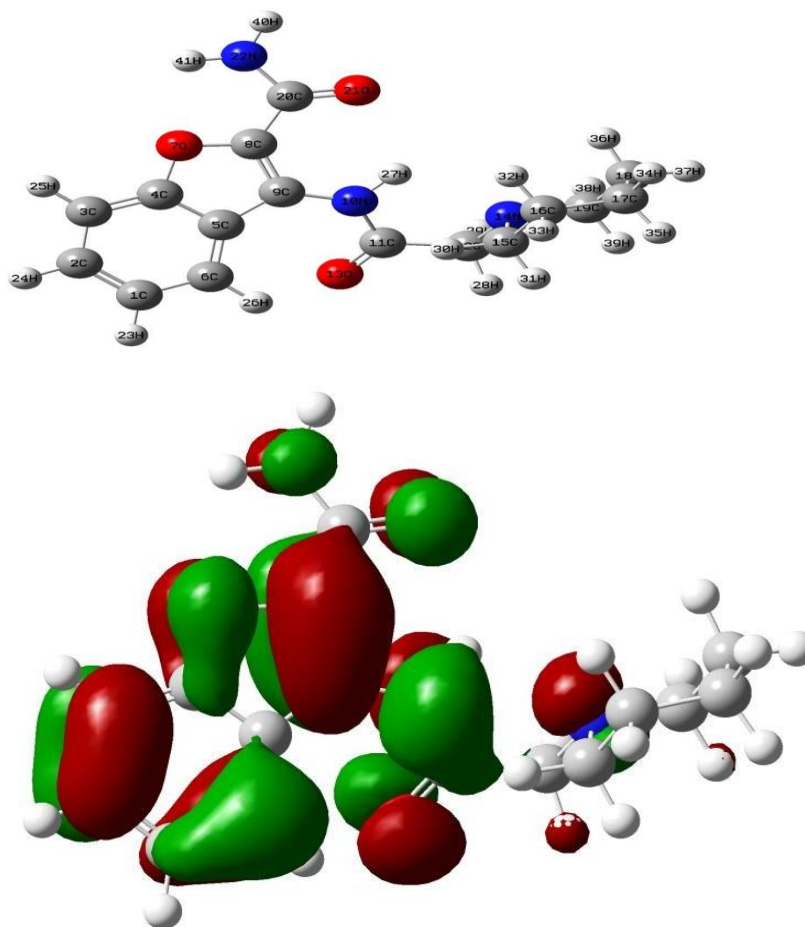


Fig 10. Highest occupied molecular orbital (HOMO) of 3PAB2C

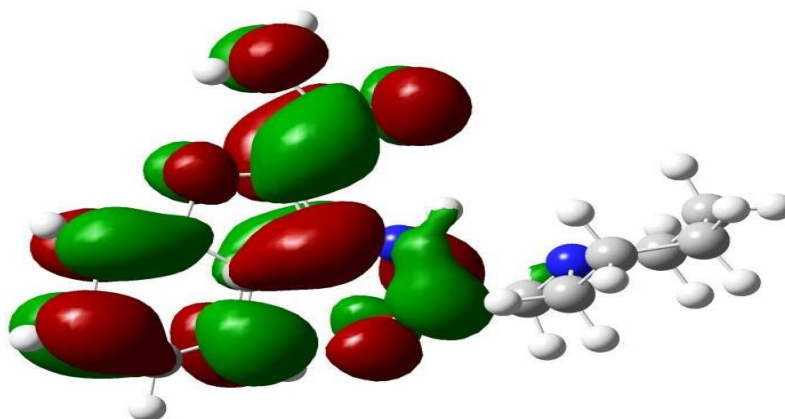


Fig 11. Lowest unoccupied molecular orbital (LUMO) of 3PAB2C

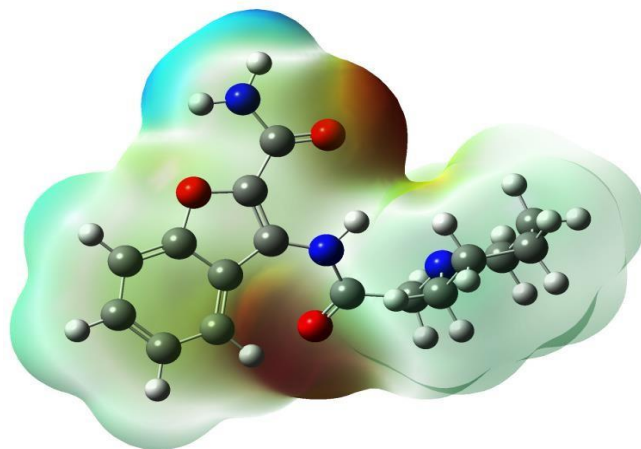


Fig 12. Molecular electrostatic potential of 3PAB2C

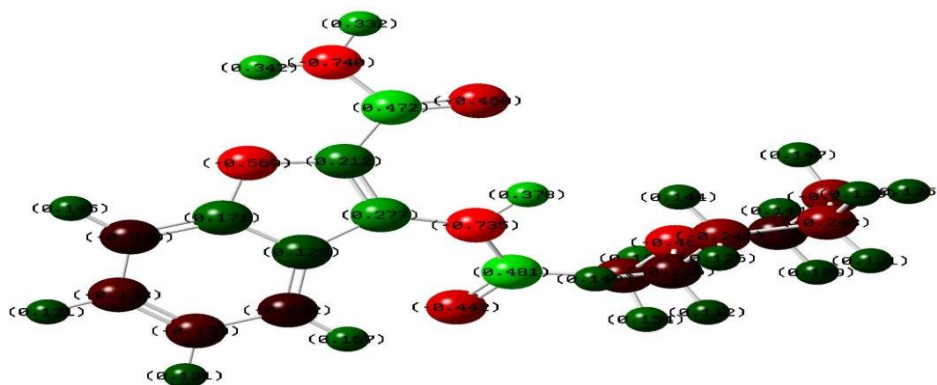
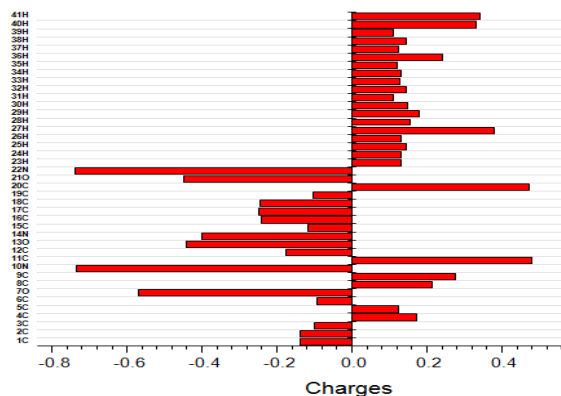


Fig 13. Mulliken charge analysis of 3PAB2C



Conclusion

The 3PAB2C was synthesized and crystallized using ethanol as a solvent by slow evaporation method and the crystal structure was recorded. The geometrical parameter has been studied. Further 3PAB2C has been characterized by ^1H NMR, ^{13}C NMR, FTIR and UV-Visible experimental spectrums. The molecular docking studies of 3PAB2C were performed against COVID-19 spike protease and the docking results were appreciable. The density functional theory (DFT) calculations were performed to support the molecular docking studies. The DFT information was coherent with docking results. Thus the present investigation provides information that 3PAB2C is a bioactive compound for COVID-19 target which may be useful to upgrade further knowledge on 3PAB2C.

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**An Illustration of the Connections between People, Culture, and Nature from Selected
Malayalam Literary Texts Translated Into English**

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ABSTRACT

The cultural implications of translation could range from lexical content and syntax to thoughts and ways of living in a specific society. "Translation is a kind of activity which inevitably involves at least two languages and two cultural traditions." (Toury 1978:200). This paper focuses on the connection of culture with human and nature through Malayalam texts translated to English. The paper interprets the translated texts from Malayalam literature texts like "Chemmeen" by Thakazhi Sivasankara Pillai, "Poovan Banana" by Vaikom Muhammed Basheer which depicts the correlation of culture with human and nature. The Twenty-first century Generation uses culture as occasion rather than adapting or implementing in their daily life, this paper shows how culture is intertwined with people and nature. As a result, the current generation is eager to learn about culture yet struggles to accept it. Hence the literary works arouse its connection between human and nature, and also will motivate the youngsters to pursue their culture.

An Illustration of the Connections between People, Culture, and Nature from Selected
Malayalam Literary Texts Translated Into English

Translation is a conversion process that enables speakers of various languages to comprehend one another's viewpoints and continue to have productive conversations. Once more, it comes down to bridging cultural gaps and doing away with any that may still persist. Because it advances the cause of improved communication between two parties, translation plays a significant role in culture and language. The ways in which people behave are reflected in culture. It is a pattern in which we examine behavior, social practices, values, and beliefs. Language is a key factor while attempting to understand a culture, and translations are necessary because one may not be familiar with the target language. ("Understanding the Relationship Between Translation and Culture")

The connection between culture and translation aids in bridging any gaps that other languages may introduce. The translation has been a part of healthy cultural exchange due to the fact that we have so many Nations and that there are so many languages spoken within each Nation. The need for trade and the interdependence of the human race have given translation the all-clear. According to translation and Culture, the act of describing how members of one cultural community view the world and their role in it for members of another (n.d.). So, the cultural aspects are being transferred to the people by literature. Human beings use art to comprehend, mediate, and express their relationship to nature. "Ecosystem people are totally dependent on the animals and plants of a particular area, deeply accustomed to that area and in stable, sustainable relation to the local ecosystem." (KA, n.d) Basheer and Pillai's communal and environmental knowledge comes from growing up, living, and working in prolific ecosystems. One structure visible in both their novels is that of nature-culture dualism which is worth analyzing in ecocritical perspective though there are many binaries that arise from it.

Thakazhi Sivasankara Pillai introduced Malayalam literature and the magical beauty of Kerala's coastal areas to the outside world through his novels. "In his best stories, one can almost hear the sound of breathing as if it were orally told. His imagination was down to earth, and his grand theme was the earth, man's attachment to the earth." (Menon, 1992) Thakazhi Sivasankara Pillai wrote his novels when 'ecological studies' or 'eco-criticism' were still in their infancy. Yet his works are noted for his vivid descriptions of nature - fertile fields, forest, sea, and beautiful scenery in and around his native place. The waterlogged setting in Thakazhi forms a metaphor in his writings; it often forms the verdant backdrop against which Kerala's turbulent social history plays itself out. (Menon, n.d.) The fields of Kuttanad, its meandering waterways, rustic ethos, and burgeoning political consciousness have fertilised the imagination of an epochal writer whose works have been acclaimed as much for their lyrical power and penetrating insights as their avowed social content and rootedness. Thakazhi's novels calibrate the movement of history across a landscape at once placid and eruptive, where dualities coexist and the poles of paradox yield sudden luminous meanings like the elements are between two electrodes. (Menon n.d.) *Chemmeen* (Prawns) , which was a departure from the writer's extreme realism, attained immense popularity in 1956. It told a tragic love story in the backdrop of a fishing village in Alappuzha. The novel was translated into 19 world languages and adapted into film in 15 countries. It won the Kendra Saliya Award in 1958. The film adaptation, directed by Ramu Kariat, won the National Film Award for Best Feature Film in 1965. The novel and its film adaptation, *Chemmeen* (1965), earned him national and international fame. *Chemmeen* is a romantic tale laced with tragedy, set against the coastal belt and centered around the lives of fisherfolk. The storyline derives from the folk suction that a fisherman's survival at sea is linked to his wife's chastity while he is away. The plot deals with

the clandestine love between a fisherman's wife and a fish trader. The novel ends with their bodies being washed ashore. It is a simple unpretentious tale that was lapped up by the public, but treated with some reservation in literary circles. (Menon, n.d.) Pillai remarks, "The sea has influenced me through a different score. The first sight that the fishermen see at the break of dawn is the infinite sea, the ocean - the storehouse of precious stones. The sea dwells like a Goddess in the mind of Araya fishermen." (Satchidanandan 81) The sea with its significant hues and unpredictable moods plays a significant role in the novel *Chemmeen*. When Karuthamma enters the seashore of Palani, her husband and the entire shore looks strange to her. The hue of the sea differs from Karuthamma's shore. Nature itself is interpreted as a symbol, and the fisherman's continuous struggle with the sea for survival is depicted in a realistic manner. Mother Nature could be seen as the donor for the fishermen as she gives them abundant wealth. "The children of the sea are the inheritors of the sea of countless riches. It is customary for their palms to brim." (*Chemmeen* 7) Children of the sea are of five kinds: Arayan, Valakkaran, Mukkuvan, Marakkan, and a fifth caste of no particular name. Only the Valakkaran is allowed to own boats and nets. In fact, in the east, the protector of the shore, the Shore Master, would allow only the Valakkaran to buy the boats and nets. (*Chemmeen*, 31) The novel portrays the routine life of the fishermen. Even before the sun rises, the boats go out to the sea, the fishermen catch their fish, and they row back to the land expecting a good trade, and the sun sets. Boats represent the journey and adventure one undergoes in his/her lifetime. Absolutely they don't find any boundaries in the sea to stop their adventure. The sea is considered both as the protector and destroyer of mankind. The fishermen community believes that chastity is the highest ideal to be followed by the women of the community. The culmination of the fisherman's ambitions to have a boat and a net of his own is depicted in the novel in the most elegant manner. The sea occupies

the major portion of the earth. The very look of the sea gives oneself a mysterious experience as the line of the sky signifies the distant horizon and

the secret land of the sea. Every element of nature in Chemmeen is united in harmony with life. As a novel with ecological insights, Chemmeen instills in the mind of the reader a sense of sea-life, conservation of nature, and steps for sustenance of human life. Vaikom Muhammad Basheer, also known as Beypore Sulthan, was a Malayalam literature writer. He was a writer, humanist, freedom fighter, novelist, and short story writer known for his innovative, down-to-earth writing style, which made him famous among literary critics as well as the general public. His works' translations into various languages have gained him international renown. In 1982, the Government of India bestowed upon him the fourth highest civilian honor, the Padma Shri. He also received a Sahitya Academy Fellowship, a Kerala Sahitya Academy Fellowship, and a Kerala State Film Award for Best Story. In 1993, he received the Vallathol Award. (Jan, 2010) Poovan Banana Short story portrays the climatic change happening during monsoon season and the protagonist of the story handles nature through his belief. "It was during the monsoons. Sunshine and rain followed each other without warning.

The water rose steadily in the river." (Basheer, 1994) Abdul Kahder goes to the town to meet his friends as usual and he gets delayed to return back home. Unexpectedly heavy rain covered the place and he is worried that his wife is alone at home. Abdul Kahder waits and then he tries to get a boat arranged but the ferryman says that it's not possible to reach the opposite shore at this time because of heavy rain and the water in the river flows hard.

"The water came up to his waist. He could not get a foothold. He began swimming with

his head above the water. He moved forward, working his hands and feet. But in the darkness, with the swift current, which way was forward and which way was backwards? He could not decide. He moved on, mainly on conjecture.”(Basheer, 1994) The protagonist was brave enough to handle the tide and tries to reach the shore by his assumption and calculation of the flow of the river. As we see, unless he knows about his environment and nature he couldn't have that confidence to cross the river. Water is the powerful element which cannot be controlled by anyone and which has the power to create as well as destroy nature. So, both the literary texts show the power of water and the connection of handling water through myth and belief. Mother Nature is portrayed as both a savior and a destroyer of life in *Chemmeen* and *Poovan Banana*. Nature remains peaceful when it feels safe. Similarly, if she detects any disruption, she is willing to take the lives of innocent individuals. These people's lives were at stake in *Chemmeen*. Chastity is the ultimate ideal to be followed by the ladies of the fishermen's community, according to the fishermen's community. Even in *Poovan Banana*, the story portrays the survival of the protagonist with a violent cyclone, reminding everyone of the forcefulness of the humility required in the face of nature. Nature has been artistically interlaced with language, becoming a persistent presence leading, encouraging, inspiring, and illuminating all who read it. The novelists have attempted to emphasize the importance of ecological balance throughout the books. The current socio-political context also serves as a trigger to heighten the gravity of the problem. The archetypes revealed by these literary texts depict both the positive and terrible aspects of nature. Not only did the lifestyles of the entire population alter, but so did our interaction with the rest of the ecosystem. To improve humanity's survival, it is necessary to investigate the fundamental green thinking in literature.

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THE HUNGRY TIDE

Arshiya

THE HUNGRY TIDE is a predictive novel of remarkable wisdom, beauty and humanity. Natural life born concurrency in the place meant for plants and creatures, recovery of nearshore areas for the construction of structures, and destruction of mangroves which are niche for seabirds, amphibians and the aquatic creatures are traced out as the root cause for the

ecological and environmental problems and the source for starving currents and earthquakes. But the Norwegian champion Arne Naess is of the view that humans are neither the monarchs nor the center of the creation, but are lodged in a vast living matrix and are subject to the laws of reciprocity(292).

This is specific in this new focuses on man's impregnable struggle with nature. Life is precarious in the marshy land of Sunderban, an archipelago of isles, spread between the ocean and plains of Bengal, there are no borders to separate fresh water from seaman, watercourse from ocean and land from water. Survival is an everybody's battle for the settlers of the Sundarbans who have learned to strike a balance with nature. A mangrove timber is a nature unto itself, unlike other timberland or jungles. There are no towering trees, no ferns, no wildflowers, no drooling monkeys; mangrove leaves are tough and the thick greenery hampers the visibility. At no moment can natural beings have any query of the terrain's hostility to their presence, of its cunning and resourcefulness, its determination to destroy or expel them. Every time dozens of people decay in the grasp of that thick greenery, killed by fire- eaters, snakes and crocodiles. The surges also are false. The runs reach several country long hauls inland and everyday thousands of mangrove timbers dissolve to arise hours thereafter. No bone dares to make a home there except the truly dispossessed and displaced who are unwanted and who have nowhere to go. They've settled there to squeeze out a living from the barren, unyielding salty tracts of land. The men are primarily fishers who depend on the tideway and the beach for fish and cranks for sustenance is unimaginable without the actuality of nature. Man is conscious of his dependence on the bountiful flora and fauna. It isn't just the cultural and aesthetic aspect of life which breathes the wealth of the beautiful earth. It's a precondition for survival itself. Like any other learned movement, ecological learned review is gaining instigation in the present day

climate of environmental enterprises. The crossroad of terrain, water, natural beings and their culture. The current which is always starving comes by twofold day- to- day, performing in a constant reshaping of the land and an lodging of anything endless. During partition in 1947, mass migration of East Bengali Hindus to West Bengal in India took place.(Eco-Feminism p-93) It was especially the advanced class Hindus who were agonized by Muslim tenants. They fled and set up exile in the homes of their rich mates and relations of Calcutta. But low class Hindus ‘scrunched’ on public and private land. The runs in Sunderbans reach nearly three hundred kilometres inland and every day thousands of acres of timber dissolve submarine. It emerges hours latterly. The islet is reshaped nearly daily by important currents. The theme of the new ranges from history to the current events which he reinterprets and weaves together. Though the new deals with the pitfall of Sunderbans with the lurking fire- eater in the jungle and white looking but deadly crocodiles in the water, the fisher who squeeze out a living, the study of Dolphins by Piya, a cetologist, Kanai a translator, the core of the novel lies in the ruthless discipline and death of East Pakistan émigrés who had run down from the Dandakaranya émigré camps to Morichjhampi as they felt that the ultimate region would give them with familiar envisions and hence a better life. This is a reality which is nearly forgotten. The story centres on two guests to Sunderban Community. It's a story about adventure and doubtful love, identity and history, set in one of the most fascinating region on the earth. Amitav portrays the globalization embodied in Americanized Piya with her hi- tech GPS device, original identity represented by Fokir, and Kanai the Delhi tenant. Part globalized modernistic entrepreneurs shifting in between a transcultural shift is seen when Kanai reads passages from his Uncle's journals, the passages are reproduced in English but the reader is asked to imagine Kanai reading them in Bengali. Some of the places mentioned in the novel are

Lusibari, Garjontola. Canning, Gosaba Satjelia, Morichjhampi and Emilybari Lusibari and Garjontola are fictitious.(JETIR) Gosaba, Satjelia, Morichjhampi and Emilybari are real places inhabited by émigrés from East Bengal and other dispossessed coalitions of society.(P.401) Lusibari becomes the main focus places in the process of development and it is a small islet that supports a population of several thousands. Some of the people were descended from the first settlers, who had arrived in 1920s.(JETIR)Others had come back-to-back, some after the partition of the key in 1947 and some after the Bangladesh war of 1971. Many people had come indeed more now, when other near islets were vigorously inhabited. The focus of their appearance was to make room for wildlife conservation systems.

Nature is a great commemorative of the flash nature of the divisions between individualities of whatever social class. In the wake of rising natural disasters like earthquakes and record this paper will emphasize the following factors – the power of Nature and its borderless state, lives of people living in suchlike unusual settings and it also underscores the fragility of man’s brief time on earth.

The study reminds one that natural beings are weaklings in the hands of immortal nature and emphasizes strongly the struggle of humans for survival in adverse conditions.Each day of their lives is hence uncertain, making survival precarious on those isles, also applied to as the “ tide country ”. Ghosh blends ethnography and history. Ethnography in which Ghoshdelineates a series of artistic features of the current country’s microcommunity. It speaks about the Utopia community establisher in the Sunderbans at the onset of the 20th century by the visionary scot Daniel Hamilton. ‘ S ’ Daniel’s education was in Scotland, a harsh deep freeze and rocky place. His pedagogues trained him that life’s most important reading is “

labour conquers everything ”.A moment nighed when Daniel Hamilton with his compatriots

had to quit his indigenous land to cast about his future and he opted India. He came to Calcutta and joined Mackinnon & McKenzie, a company with which he'd a family connection.(JETIR). This company dealt tickets for the P&O shipping line, which was further one of the largest in the world. Young Daniel worked hard and vended multiple first class, equivalent class, third class, steerage Ghosh has made tremendous exploration work and has presented the evolutionary system of creation in a unique way. He has been preoccupied with the presence of animistic creation and its ecological balance in that region.(Eco-critic p-51) .He imparts so important information about gigantic dolphin, and about foliage and fauna of the position. He also shows Sunderban isn't only the meeting of tideways and the blue; the place is an amazing meeting point of different civilizations, which seems insolvable at any other place. It's also a strange love story of two addicts Piya and Fokir. They spent days in the stretches of the canal on the tree. Where both the addicts couldn't swap words each other. Ghosh' s the Hungry Tide is set in the mangrove islets of Sunderbans, West Bengal. The Hungry Tide explores exile resettlement in the timber reserves of Marichjhapi, Sunderban and the complex Man- creature relationship in the archipelagos ecosystem. This novel focuses on the ongoing stress between humanity and the environs in the Sunderbans, the Tide country of West Bengal, India and Bangladesh. This paper will give a new sapience to the anthologies about the untouched region of this novel. This sixth novel of Amitav Ghosh, considers the conflicts between the terrain and its tenacious residers, andbetween those groups intent on conserving the Sunderbans unique submarine life and barracuda population; eventually at the expenditure of its residers. The novel's centre character is a scientist, the American Piyali Roy from India. So it isn't surprising that technology appears with some frequence throughout The Hungry Tide.Ghosh offers both alarms and cautions of how it can mix with tone. Amitav Ghosh has discovered yet another new

home, calling a atypical place from its chronicle, lingo and the mythos and getting it to life. Yet the achievement of *The Hungry Tide* is in its disquisition of a far darker and further unknowable jungle, the natural heart. This novel is at its stylish when it describes the wild, untameable and fierce rates of nature, which don't bend to natural, will. This novel is full of pictorial descriptions of barracuda and their mortal prey, crocodiles, snakes, large timber of mangroves, storms and fatal typhoons. *The Hungry Tide* is set in a remote part of northeast India know as the Sunderbans which consists of thousands of small islets formed by the interflow of two gutters as they flow into the Bay of Bengal. Life is precarious with shifting islets, fire-eaters and other bloodsuckers, poor soil, and minimum contact with the outside world. Ghosh describes the people of the Sunderbans, their history, and their struggles with natural world.(JETIR) .It's an amazing story of the land and the people of Sunderban. The struggle of the people is against nature, the current, the storm, the fire-eater, and the fearful surroundings. The new seeks to link the natural stories with the broader story of the ecological and environmental forces that have acted on the region. agreeing the creatures allows Nirmal to begin to hear to the voices of others, and find his humanity not in its exclusivity and permanence but in its durability with the ephemerality and transformative processes of the natural world. Their relationship with that world isn't defined by absentminded generalities similar as conservation. The natural world is one with which they live in collective reliance, fumbling it and when necessary defending themselves against it.It's different but in a way more profound relationship with the natural that Piya has to accept when she's forced to realise that Fokir isn't a bulge of her ideal understanding and conserving nature.When Fokir joins in the payoff of the trapped fire-eater that has attacked the townies she's shocked and disappointed since she has assumed that he'd partake her beliefs.

When Fokir offers her his view of the event, that when a fire-eater comes into a natural agreement it wants to die, she refuses to hear it and literally covers her cognizance. But in short order she realises that her rejection of the townies standpoint of the barracuda places her in the same camp as the lumberers, when she sees the same loose guard that she had encountered on her trip to Lusibari on his way to beat and bully and wring backhanders from the vill for its tone- preservative action. The fire-eater payoff leads to the most unequivocal discussion of the issue of conservation and its natural goods in the novel. Piya's counter that ' if we don't admire what was intended not by you or me but by nature, by the earth, by the earth that keeps us all alive ' if we ' cross that imaginary line that prevents us from deciding that no other species matters except ourselves.

The Hungry Tide considers not only the issue of environmental conservation and how it might be achieved but the issue of how we might begin to understand the diversity of the natural not only as a conversion between different kinds of earthborn societies and values, the rich, the poor, the developed, the natural, the fluent and the silenced. But also as a adaptation of the idea of how the human is defined in itself and how this needs to reflect the broader ranks of life across species and truly across the idea of the whole interrelated pattern of living forces that constitute the globe.

Conclusion

Nature which is spread per over is sympathetic to man. It not only gives solace to man but is also its instructor, companion, guardian and anchor. Why should besides man destroy it? Green which stands for novelty and humbleness is soon fading amid all other material colours. Only when man lives in the midst of nature can he be a natural. With nature laggardly losing

itself, man too is soon coming an creature. The Hungry Tide provides multiple optics on the Sunderbans ecosystem of mangrove forested isles and mudflats, representing the constant conversions it undergoes, because of day-to-day tidal inundations with sections of islet being temporary submerged and with seawater. Ghosh's utmost gift as a pen may well be his sense of place. A topography, a metropolis, a hamlet on the edge of a desert; it's these images that we summon from his novels when we're retreated from them in memory. The region is supposed to conclude its name from the sunderi tree, as the mangrove is locally called in his book. Ghosh has presented the overall natural and environmental approach to his vision clear in his fresh The Hungry Tide. The pains have been made to prove that the novel of Amitav Ghosh is analysed on the eco critical study and would sure give a new and a unique way of reading to the albums in the environs of ecological study and approach.

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KEY WORDS;

Hungry tide, Sunderbans, Immortal nature, GPS, Oceanologist, Ecology, Ecosystem,

Globalization, Canals, Conservation, Poor Soil, Mangrove forests.

THE IMPACT OF COMMERCE TOWARDS ENVIRONMENTAL INDIA

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ABSTRACT

India's rapidly growing commercial sector contributes significantly to the country's economic development and employment opportunities. The rise of online trading in India has revolutionized the trading environment, creating convenience and opening up new markets. Traditional brick-and-mortar stores still play an important role in India's retail industry, connecting local communities and offering personalized experiences. Governments require comprehensive assessments to assess the potential environmental impacts of commercial projects. Certification systems promote sustainable practices and enable consumers to make informed decisions while supporting environmentally conscious companies. Strict emissions

standards are imposed on the industry to reduce environmental impact and protect air quality. Many initiatives and solutions for sustainable trade practices in India, such as adoption of renewable energy, eco-friendly packaging and sustainable agricultural practices.

KEYWORDS E-commerce, Environmental Impacts, Balancing Commerce and Environmental Conservation.

INTRODUCTION

Global trade, the exchange of goods and services across international borders, has brought about unprecedented economic growth and connectivity with the world. However, this dynamic system also raises significant environmental concerns that need to be addressed to ensure a sustainable future. The environmental impact of global trade is a complex issue that encompasses many different aspects, from carbon emissions and resource depletion to biodiversity loss. This article examines these challenges, explores potential solutions, and emphasizes the importance of reconciling trade and environmental protection.

1. Carbon footprint and emissions: Global trade by its nature involves transportation, which often relies on fossil fuels, contributing to greenhouse gas emissions and climate change. Transporting goods over long distances creates significant carbon emissions as ships, planes and trucks burn fossil fuels to transport products around the world. Additionally, the rise of e-commerce has led to an increase in package delivery and corresponding emissions. To combat these emissions, we must switch to cleaner modes of transport, adopt energy-efficient technologies and promote local production to reduce the distance goods travel.

2. Deforestation and resource depletion: The demand for raw materials and agricultural products in global trade has led to deforestation and resource depletion in various regions of the

world. Forests are cleared to make way for agricultural and industrial activities, leading to habitat loss, ecosystem disruption and the release of stored carbon. Sustainable sourcing practices, such as certified wood and responsible farming practices, can mitigate these impacts by encouraging responsible land use and resource management.

3. Loss of biodiversity: Expanding global trade can lead to the unintentional transfer of invasive species to new areas, threatening native biodiversity. Invasive species can compete with native species, disrupt ecosystems, and harm agriculture and human health. Stricter regulations and quarantine measures are needed to prevent the unintended spread of invasive species through trade.

4. Production and Waste Treatment: The production of goods for global trade often involves excessive packaging, leading to increased waste production. In addition, the disposal of electronic waste (e-waste) from the trade of electronic products poses a significant environmental challenge. Implementing circular economy principles, which focus on reducing, reusing and recycling materials, can help reduce waste and related environmental impacts.

5. Sustainable business practices: To minimize the environmental impact of global trade, various strategies can be used: Green logistics: Promote distribution and logistics systems Energy-saving transitions, such as using more fuel-efficient trains and routes, are optimized. And investment in rail and multimodal transport. Eco-labelling and certification: Certifies products with an eco-label to inform consumers about the environmental impact of their choices, encouraging them to choose sustainably produced products.

6. Fair Trade: Supports fair trade practices to ensure producers are compensated fairly, which can lead to more sustainable and environmentally friendly production methods. Carbon Pricing:

Implement carbon pricing mechanisms to internalize the cost of environmental emissions into the price of traded goods, thereby incentivizing businesses to reduce their carbon emissions.

7. Trade and Environment Agreements: Integrate environmental considerations into trade agreements to promote sustainable practices and ensure that economic growth is linked to environmental protection.

SUSTAINABLE BUNDLING: A WAY FORWARD

India has seen the rise of different economical bundling activities over businesses highlighting a developing commitment to natural preservation. In India, companies are receiving economical bundling hones such as paper and cardboard choices, biodegradable materials, eatable bundling, returnable/reusable frameworks, bundling measure enhancement, up cycled/recycled choices, and eco-friendly e-commerce bundling arrangements.

This shift decreases dependence on single-use plastics, advances renewable assets, limits squander and enhances fabric utilization Endeavours are too being made to raise client mindfulness and advance capable transfer hones. These feasible bundling hones in India are driving a move towards naturally neighbourly options, lessening the natural affect of bundling squander. By receiving inventive arrangements and advancing dependable utilization and transfer companies contribute to a more maintainable and circular economy, cultivating a greener future for India.

DRIVING ECONOMICAL BUNDLING

ILLUSTRATIONS FROM INDIA'S DRIVING COMPANIES

Coca-Cola Co., a worldwide refreshment monster is taking critical strides towards sustainable bundling and tending to plastic contamination in India, the company has joined strengths with Zepto, a technology-driven speedy commerce company, for the Return and Reuse activity. This organization underscores Coca-Cola's commitment to combating plastic contamination by advancing dependable squander administration and expanding reusing rates. Through the Return and Reuse activity, Coca-Cola and Zepto point to set up a closed-loop framework in which bundling materials are collected, reused, and reused. This approach makes a difference decrease the natural affect of Coca-Cola's items whereas limiting plastic squander in landfills or water Recordings. The activity energizes shoppers to return utilized Coca-Cola bundling to assigned collection focuses, and Zepto utilizes imaginative innovations to sort and handle the returned materials productively. This collaboration underpins a circular economy by reintroducing reused materials into the fabricating prepare. Coca-Cola's organization with Zepto and its feasible bundling activities set a positive case for the refreshment industry. By accentuating collaboration, technology-driven arrangements, and buyer engagement, the company illustrates its commitment to combating plastic contamination and progressing towards a more economical future.

Amazon.com Inc., one of India's biggest ecommerce stages, is making noteworthy endeavours to advance economical bundling hones. Perceiving the natural affect of bundling squander, the company has executed different activities to decrease its biological impression and cultivate a more economical approach to bundling and conveyance. To begin with and first, Amazon India is effectively working towards limiting intemperate bundling materials. The company has actualized bundling calculations and rules that advance the measure and amount of packaging materials required for each item, lessening superfluous squander. This approach guarantees that

bundles are suitably measured, limiting space and diminishing the by and large volume of bundling materials utilized.

In expansion, Amazon India is advancing the utilize of eco-friendly bundling materials. The company empowers its vendors to utilize recyclable, biodegradable, or compostable bundling materials at whatever point conceivable. By advertising direction and assets, Amazon tridis encourages the appropriation of maintainable bundling hones among its tremendous vender organize, contributing to the lessening of plastic squander It has presented the Disappointment Free Bundling program, which centres on decreasing intemperate bundling and making it simpler for clients to open and reuse bundles. This program points to dispose of superfluous layers of bundling such as intemperate plastic wraps or tape, in this manner diminishing squander and making the unboxing involvement more helpful for clients. The illustrations appear that companies are grasping economical bundling hones, such as paper and cardboard options, biodegradable fabric, eatable bundling returnable/reusable systems, packaging estimate optimization, up cycled/recycled choices, and eco-friendly e-commerce bundling.

These activities point to decrease single-use plastics, advance renewable assets, amplify item rack life, and limit squander. By executing returnable/ reusable system upgrading bundling sizes, and utilising up cycled reused materials, companies contribute to the circular economy and diminish natural affect. The e-commerce division moreover organizes feasible bundling utilizing moderate plans and advancing recyclable arrangements whereas raising client mindfulness around dependable transfer. These endeavours collectively cultivate a more economical and eco-conscious bundling scene in India.

CONQUERING PLASTIC POLLUTION

Behaviour Plastic organisations incentivising India Swachh Abhiyan entrance organisations prioritise essential to incentivise India addressing the plastic pollution crisis requires comprehensive efforts on multiple fronts. Effective waste management systems, improved recycling infrastructure, and behaviour change at all levels of society necessitate collaboration between governments, businesses and civil society organisations

Here are four ways in which we can achieve this goal Investment In Recycling Infrastructure India's success in combating plastic pollution hinges on investing in robust recycling infrastructure. The government should work closely with the private sector to establish recycling facilities and promote adopting sustainable practices By incentivising recycling initiatives, supporting small-scale recyclers and fostering innovation in waste management technologies, India can significantly reduce plastic waste in landfills and water bodies Public Awareness And Education India needs a nationwide campaign like Swachh Bharat Abhiyan encouraging citizens to reduce their plastic consumption, entrance eco-friendly alternatives and participate in recycling initiatives Educational institutions, civil society organisations and media platforms can be vital in disseminating information and empowering individuals to make sustainable choices. Corporate Responsibility India's business community must actively combat plastic pollution Companies should prioritise sustainable packaging alternatives, invest in research and development of eco-friendly materials, and promote responsible waste management practices throughout their supply chains.

Encouraging industry collaboration, the government can incentivise corporations to adopt greener practices while holding them accountable for their environmental impact International

Collaboration India's efforts to combat plastic pollution should not be confined within its borders Collaborating with international partners, sharing best practices and leaning from successful initiatives worldwide will strengthen India's resolve and amplify its impact.

World Environment Day 2023 gives India a platform to engage in global dialogue by building partnerships that can drive meaningful change in the fight against plastic pollution As the world celebrates World Environment Day 2023, India finds itself at a critical juncture in its fight against plastic pollution. This global event is a reminder that every individual's actions matter and that governments and businesses must take responsibility for their role in addressing this crisis. By investing in recycling infrastructure, raising public awareness, promoting corporate responsibility and strengthening international cooperation, India can defeat plastic pollution. It is time for India to step up its efforts by demonstrating its commitment to environmental sustainability and leading the way to a clearer future for all people and the environment.

CONCLUSION

Global trade is a powerful force that has shaped the modern world, but its environmental impact cannot be ignored. As the world grapples with the challenges of climate change, resource scarcity and biodiversity loss, it is imperative to find ways to make global trade more environmentally sustainable. By adopting innovative technologies, promoting responsible consumption and production patterns, and integrating environmental considerations into trade policies, we can work towards a future where global trade supports economic growth without compromising the health of our planet. Balanced trade and sustainability are not only a necessity but also a collective responsibility to ensure a prosperous and prosperous world for generations to come. Governments require comprehensive assessments to assess the potential environmental impacts of commercial projects. Certification systems promote sustainable practices and enable

consumers to make informed decisions while supporting environmentally conscious companies. Strict emissions standards are imposed on the industry to reduce environmental impact and protect air quality. Many initiatives and solutions for sustainable trade practices in India, such as adoption of renewable energy, eco-friendly packaging and sustainable agricultural practices.

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APPLYING AI IN ENVIRONMENTAL MONITORING AND EARLY WARNING SYSTEMS OF NATURAL DISASTERS

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The Waves - A Norwegian Disaster Film

"The Wave" is a 2015 Norwegian disaster film directed by Roar Uthaug. The movie is set in the fictional town of Geiranger, which is situated at the base of a mountain by a fjord. The story follows geologist Kristian Eikjord and his family as they experience a series of unusual geological events. Kristian's expertise leads him to believe that a catastrophic rockslide is imminent and could trigger a massive tsunami. As he desperately tries to warn the town's inhabitants, chaos ensues as the wave approaches. The film is a tense and thrilling portrayal of the race against time to survive the impending disaster and escape the town. "The Wave" combines suspense, drama, and stunning visuals to depict a natural disaster scenario and the human response to it

"The Wave" is a Norwegian disaster movie released in 2015, directed by Roar Uthaug. While the film primarily focuses on a fictional tsunami that threatens a small Norwegian town, it does touch on environmental concerns indirectly.

The movie's plot centers around the collapse of a mountain into a fjord, which triggers a massive tsunami. While the immediate danger is the impending wave, the underlying cause of the disaster is geological instability, which can be tied to broader environmental issues. The film highlights the potential risks associated with climate change, as warming temperatures can lead

to the melting of glaciers and changes in the earth's crust, potentially increasing the likelihood of such events.

Although "The Wave" is primarily a disaster thriller, it serves as a reminder of the real-world environmental challenges we face. The film doesn't delve deeply into environmental themes, but it underscores the importance of understanding and addressing geological and climatic changes to mitigate potential disasters. This connection between the movie and environmental concerns demonstrates how cinema can be a vehicle for raising awareness about the complex issues our planet faces.

This Movie delves into the Technological and Computer's major role in detecting the disastrous Tsunami as the protagonist is a Geologist. Only through the Warning signs created by the sensors, the predecessor of Artificial Intelligence some of the people were rescued and if not it wouldn't be possible.

On the other hand, due to the rapid growth of Technology, the Environment is affected the most and the massive destruction of the town is one of the effects of technology on nature.

"The Wave" is a Norwegian disaster film that tells the story of a family facing a catastrophic event. Geologist Kristian Eikjord, who has recently moved with his family to the picturesque town of Geiranger, becomes increasingly concerned about unusual geological activity. His fears are realized when he predicts that a massive rockslide is imminent, which could trigger a devastating tsunami in the fjord below. As the town's inhabitants struggle to evacuate in the face of impending disaster, Kristian and his family find themselves in a race against time to survive and escape the wave. The film is a gripping and suspenseful portrayal of their fight for survival in the face of nature's fury.

Role of Technology and AI in environment

Rapid advancement of computers and technology has brought about numerous environmental challenges in today's world. While these innovations have undoubtedly improved our lives in many ways, they have also contributed to several environmental issues that require attention and action.

First, electronic waste, or e-waste, has become a significant problem. The ever-shortening lifespan of electronic devices, combined with a surge in consumerism, has led to mountains of discarded computers, smartphones, and other gadgets. Improper disposal of these items often results in toxic materials leaching into the environment, posing health risks and polluting soil and water.

Energy consumption is another major concern. Data centers, which power the internet and cloud computing, are energy-intensive operations. The vast amounts of electricity they consume contribute to greenhouse gas emissions, exacerbating climate change. The manufacturing and disposal of electronic devices also have substantial energy footprints.

Additionally, the mining of rare earth metals and other resources required for technology production can lead to habitat destruction, soil contamination, and other ecological damage. These resources are often sourced from environmentally sensitive areas, further exacerbating the environmental impact.

Moreover, our digital lifestyles have changed the way we communicate and consume. Online shopping, streaming services, and virtual meetings have reduced the need for physical

presence but have led to increased packaging waste, energy use for data transmission, and often unnecessary consumption.

To address these environmental challenges, there is a need for increased recycling and responsible disposal of electronic devices, as well as the development of more energy-efficient technologies. Businesses and individuals can take steps to reduce their digital carbon footprint by conserving energy, reducing e-waste, and making sustainable choices in their tech purchases. Furthermore, policymakers and industry leaders must work together to implement regulations and design products with a more significant focus on sustainability.

The proliferation of computers and technology has undeniably improved our lives but has also introduced a host of environmental issues. Recognizing these challenges and taking steps to mitigate them is crucial in building a more sustainable and eco-friendly future in our increasingly digital world.

Vital role in Disaster management and precautions

Early Warning Systems: Advanced technology, such as sensors, satellites, and data analytics, can be used to create early warning systems for various disasters. For example, in the case of technological disasters like industrial accidents or nuclear incidents, sensors can detect abnormalities and trigger alarms, allowing for rapid response and containment

Data Analysis and Prediction: Technology can be used to analyze vast amounts of data to identify patterns and predict potential disasters. Machine learning and artificial intelligence can help in forecasting trends, such as cyberattacks or system failures, allowing organizations to take preemptive measures.

Cybersecurity Measures: To address technology-related disasters like data breaches and cyberattacks, more advanced cybersecurity technology is essential. This includes intrusion detection systems, encryption, and AI-driven security measures to protect against threats.

Environmental Monitoring: Technology can be used to monitor and manage environmental impacts caused by technological activities. Remote sensing, data analysis, and IoT devices can help track pollution, deforestation, and other environmental concerns, allowing for timely interventions.

Sustainable Technology: The development of environmentally friendly technology can help reduce the environmental impact of industrial processes. For example, clean energy solutions and green manufacturing technologies can minimize pollution and resource depletion.

Simulation and Training: Advanced technology can be used to create realistic simulations and training programs for disaster response and recovery. This allows organizations and emergency services to practice their response to various scenarios and improve their preparedness.

Public Awareness and Communication: Technology, such as social media and mobile apps, can be used to disseminate information and warnings to the public during disasters. Improved communication channels help people make informed decisions and evacuate when necessary.

Disaster Recovery Technology: In the aftermath of technological disasters, advanced technology can assist in recovery efforts. This includes the use of drones for damage assessment, 3D printing for rapid construction, and AI for resource allocation.

Regulation and Standards: Technology can facilitate the development of regulatory frameworks and industry standards to ensure the safe and responsible use of technology. This helps prevent disasters by establishing guidelines for best practices.

International Collaboration: Technology enables global collaboration and data sharing to address technology-related disasters on a broader scale. International organizations and governments can work together to tackle common challenges

While technology can cause disasters, it also offers valuable tools and solutions for preventing, mitigating, and responding to these issues. The key lies in responsible and ethical use, as well as continuous innovation to address the challenges that technology itself may create

The role of technology and AI in environmental conservation.

The integration of technology and AI in environmental protection offers a more efficient, data-driven, and proactive approach to preserving the planet. It enhances our ability to monitor, manage, and mitigate environmental challenges, contributing to a more sustainable future.

In conclusion, Anything which exceeds the limit may result in various effects on the environment and the organisms and also a proverb

“Diamond cuts Diamond” suits the best for this movie as the People in the town were saved by the warning signs provided by the technology of the Tsunami which was caused by the adverse use of the same technology.

Smart Agriculture: Precision agriculture powered by technology and AI optimizes farming practices, reducing the environmental impact of agriculture by minimizing the use of resources like water and pesticides.

Renewable Energy: AI helps enhance the efficiency of renewable energy sources like wind and solar by optimizing energy generation and storage.

Conservation Finance: Technology enables crowdfunding and blockchain-based initiatives to fund environmental projects, ensuring transparency and accountability in conservation efforts.

Early Warning Systems: AI can predict natural disasters, such as floods and wildfires, and alert communities, giving them more time to prepare and evacuate.

Policy and Decision Support: Data analytics and AI assist policymakers in making data-driven decisions about environmental regulations and conservation strategies.

AVATAR: EXPLORING THE NEXUS OF NATURE AND HUMAN PSYCHE - AN ENVIRONMENTAL PSYCHOLOGY PERSPECTIVE

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Environmental psychology is an interdisciplinary field that focuses on the interaction between human beings and their physical environment. It examines how the environment affects human behaviour, emotions, cognitive processes and psychological well-being. The study

reviews "Avatar," the 2009 science fiction film directed by James Cameron. The film, set in the mid-22nd century on the fictional planet of Pandora, explores several themes related to environmentalism, biophilia and the interconnectedness of all living things, all of which have significant implications for psychological well-being. The symbiotic relationship between the Na'vi people and the vibrant, bioluminescent flora and fauna exemplifies the restorative power of nature, highlighting the importance of preserving natural environments in the real world to support human mental health.

Keywords: Environmental Psychology, Avatar, Psychological Well-Being, Biophilic, Environmentalism, Interconnectedness

Avatar, the 2009 science fiction film directed by James Cameron, emerged as a cinematic landmark upon its release, captivating audiences worldwide with its breathtaking visuals and compelling narrative. Beyond its entertaining value, the film delves deeply into the complex relationship between people and nature, aligning with Environmental Psychology, a discipline that focuses on the interaction between human beings and their physical environment. The concept has been portrayed in various forms of literature across different genres.

The movie embarks with Jake Sully, the protagonist, narrating his experiences of being a paraplegic military veteran. Wheelchair-bound, he has come to terms with the unfairness and discrimination of earth. Shortly after his brother's death, Jake is assigned as a replacement on a mission to "Pandora," the Earth-like extrasolar moon that presents a lush, vibrant world teeming with diverse flora and fauna. The planet inhabits the indigenous Na'vi people who live in harmony with their environment.

Through the character of Jake Sully, James Cameron illustrates the psychological impact of immersing oneself in a natural environment and how transformative it can be. Jake becomes an 'Avatar' – an artificial body crafted by the combined DNA of both humans and the Na'vi - and explores Pandora. Environmental psychology suggests that contact with nature can enhance mental well-being, reduce stress, and improve cognitive function. Jake's experiences on Pandora exemplify these psychological benefits and further explore the transformative power of nature. At the beginning of the film, Jake Sully approaches Pandora with a human-centric and utilitarian mindset, viewing nature merely as a resource to be exploited but there is a stark gradual change as he becomes part of the Na'vi community, Jake learns their ways, their respect for nature, and their spiritual connection to Pandora.

His exposure to biodiversity and nature fosters a deep appreciation for the intrinsic value of every living being, reinforcing the importance of preserving each species and its habitats. He particularly resonates with the phrase expressed by the Omaticaya, a Na'vi tribe, when greeting. "I see you." This expression symbolizes acceptance, empathy, and a deep spiritual connection. It implies that the speaker recognizes not just the external appearance of the individual but also their inner being, their struggles, hopes, and emotions.

Moreover, operating his avatar provides him with a newfound sense of purpose, freedom, and a connection to nature that he had lost on Earth due to his disability, so much so that he starts prioritising his avatar over his own natural human body gradually throughout the movie, a feeling that becomes mutual amongst all the avatar operators, emphasising the need for ecological conservation for the physical as well as psychological benefits that it reaps.

In accordance with the biological and spiritual interconnectedness of nature where all life is interconnected and dependent on one another for survival, the Na'vi share a strong belief in the continuous flow of energy between all living things. They place a special value on the concept that every action has a reaction and that all living things are interwoven in a single, uninterrupted cycle of energy exchange. Their deep respect for the natural environment and its inhabitants is driven by this fundamental belief, which also fosters a strong feeling of responsibility and mindfulness in their interactions with it. Therefore, they take life only when absolutely required and not for sport. Even then, they carry out a small ritual as a sign of adherence to and respect for nature's laws.

The ritual entails the recitation of a prayer: “I see you, brother. Thank you. Your spirit goes with Eywa, your body stays behind to become part of the People.” The beginning clauses indicate the cultural acknowledgement and recognition of all living beings including animals, whilst highlighting the gratitude towards the taken life for its contributions to society. The following words “Your spirit will now be with Eywa” imply a belief in a cyclical view of life and death, where individuals return to the spiritual essence of the natural world after death. This belief promotes a profound respect for nature and its cycles, encouraging harmony with the environment rather than exploitation. It reflects a holistic understanding of life, acknowledging the importance of every living being in the grand scheme of existence.

The ending phrase “but your body will remain for the people.” emphasises the communal aspect of life. It suggests that even though an individual's spirit transcends into the spiritual realm, their bodily presence continues to serve the physical one. This could also be interpreted as

a message about selflessness and the importance of contributing to the well-being of the community, even in death.

In addition to that, The Na'vi believe immensely in “Eywa”, their deity composed of all living things in their universe, deeply resonating with the doctrine of Pantheism which regards the universe as a manifestation of God. It embodies the fundamental conviction that nature transcends mere physicality, diving into the spiritual world where all living species are venerated for their interconnectivity.

The Na'vi people's belief in the supernatural extends to the existence of spirits in the natural world, imbuing Pandora with wisdom and spiritual enlightenment. This spiritual connection with nature goes well beyond personal beliefs for them; it is the foundation of their cultures and the basis of individual well-being. This is illustrated in the film through Neytiri, the daughter of the chief and shaman. She spares the life of the protagonist due to a perceived sign from Eywa, representing human cultures that have a deep-rooted religious belief in the transcending of the environment. This respect for the metaphysical qualities of nature translates into a steadfast commitment to environmental protection, inspiring viewers to contemplate their own spirituality in the context of the natural world, and fostering a greater appreciation for the sanctity of nature.

Avatar also centres around the theme of Biophilia, a term coined by Biologist Edward O. Wilson. He defined it as “The innate tendency to focus upon life and life-like forms and, in some instances, to affiliate with them emotionally”, describing the inherent human tendency to seek connections with nature. This deep-rooted affinity for the natural world has been an integral part of human evolution, shaping our cognitive, emotional, and social development. It is reflected in

the Na'vi culture, they live in complete harmony with their environment, respecting and embracing the diverse flora and fauna around them. Their intimate relationship with the natural world goes beyond mere survival; it's a spiritual and psychological symbiosis, in sharp contrast to the devastating exploitation of the human mining industry.

The director dives deeper into the theme by fabricating actual physical bonds between the flora and the fauna of Pandora. "Tsaheylu" is a physical process where the Na'vi use their queues, a hair-like appendage on their head, to a similar one on the creature. Through this connection, they share thoughts, emotions, and sensations, creating a deep and intimate bond. It serves as a means of mutual communication and cooperation to reach a common goal. The concept of Tsaheylu is central to the Na'vi way of life and emphasizes the interconnectedness of all living beings, it is not about dominance but rather establishing a symbiotic relationship where both parties benefit and share a profound connection.

The film's narrative further unfolds against the backdrop of environmental destruction, highlighting the human greed for monetary benefits and the consequences of ecological exploitation. The former is portrayed through the actions of the organization Resources Development Administration (RDA) which primarily focuses on resources in outer space. The RDA are in constant conflict with the indigenous and even goes as far as to demolish "Home Tree"- the habitat of the Omaticaya tribe- for the highly valuable rare mineral known as "Unobtainium" found underneath the area. The organization bombed and destroyed both abiotic and biotic components of nature, including human and animal lives, paying no heed to the consequences. This may serve as an allegory to colonization and how the Great British Empire destroyed entire countries and civilisations for their selfish gains without any remorse or feeling

and by depicting these events in a science fiction setting, Avatar allows viewers to reflect on the darker aspects of human history and the potential future consequences of unchecked greed and exploitation.

The movie mirrors challenges that exist in real life, where self-interest and the pursuit of financial gain put human welfare at risk, resulting in a decline in worldwide physical and psychological wellness as well as a lower quality of life. Many communities face Natural resource depletion, deforestation, pollution, and climate change, resulting in stressors that have a multidimensional impact on human existence. Studies have shown that environmental destruction has a direct effect on physical well-being and an indirect effect on emotional well-being. Anxiety, despair, and a pervasive sense of detachment from the natural world have grown increasingly frequent in communities struggling with the impacts of environmental decline. Addressing these struggles necessitates not only environmental conservation initiatives but also a collective societal commitment to reviving the human-nature relationship and nurturing a fresh sense of connection and belonging to the natural world.

In conclusion, Avatar serves as a fictional platform in which various psychological concepts have been portrayed including the transformative power of nature, biophilia and interconnectedness. It also focuses on ecological destruction and its consequences, prompting a call to action and encouraging nations to reconsider and evaluate their relationship with each other and the environment. It urges the world to adopt sustainable initiatives, conserve biodiversity, and promote harmony between human beings and nature. By responding to this plea, humanity will not only protect and preserve the balance of nature but also strengthen

their psychological resilience, ensuring a better and more harmonious living for future generations.

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AN ECO CRITICAL ANALYSIS OF THE TAMIL SONG “ ENJOY ENJAAMI”

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EnjoyEnjaami is a Tamil song, featuring singer Dhee and Lyricist Arivu. This song was released in the year 2021 and became a massive hit worldwide. The song met commercial success not just for its musicality, but also for its lyrics with in-depth meaning. The song is dedicated to the Tamil people and their indigenous culture. In general, It discusses the civilizations and human relationships with Earth. Moreover, the song portrays the ecological challenges faced by the marginalized Tamil community and its call for sustainable practices. The paper aims to focus on the Eco-critical analysis of the Tamil song Enjoy Enjaami and its potential

impact on promoting sustainability. Furthermore, It also discusses how its bio-regional perspectives and environmental consciousness address the challenges faced in the 21st century.

Keywords: Eco Criticism, Bio regionalism, Ecological challenges, sustainability, environmental consciousness.

An Eco Criticism is an environmental movement that merged in the 1960s, with the publication of Rachel Carson's *Silent Spring* in 1962. It is a study that connects any form of art such as literature, Music, Paintings and Architecture with the environment. It generally analyses the relationship between Human beings and the natural world in an art form. Its aim is to study how human beings react in relation to nature and ecological aspects. " This form of criticism has gained a lot of attention during recent years due to higher social emphasis on environmental destruction and increased technology". It is also known by a number of other designations such as Eco poetics, or green studies.

The Tamil song *Enjoy Enjaami* (2021) is sung by singer Dhee and Lyricist Arivu, and composed by popular Tamil Music Director Santhosh Narayanan. The song was considered to be one the greatest success for the Tamil independent musical industry. It became popular not only for its tune and musicality but also for its lyrics which has deeper meaning. The song has some ecological themes and depicts bio regional perspectives. It talks about the relationship between Mankind and the land they lived and evolved.

"According to the lyricist, Arivu, the song was written as a celebration of his roots, harkening back to a time when humanity was a fledgling civilization, living in harmony with the turns of the earth and the many lives that shared it with them. His inspiration came from

several places." The song lyrics explores ecological themes such as deforestation, loss of biodiversity, climate change, and Water scarcity.

The song showcases a strong bio-regional perspective by highlighting the cultural identity and ecological resilience of the Tamil region. In one his famous interviews, lyricist Arivu said "The world is for everybody" he also claimed that " nobody can manufactureland...people of ancient civilization havenot considered the land as a property." One of the renowned magazine says, "It establishes and proclaims the customary rights over the environment in a profoundly politicalfashion: We own the land and soilbecause it was bequeathed to us byour ancestors with a blessing to livewell here" - The Federal

It addresses several issues of environmental justice, such as; unequal distribution of resources, Impact of industrialization on marginalized communities, Need for equitable access to clean water and sustainable living conditions. The Tamil song "Enjoy Enjaami" serves as a powerful catalyst for environmental awareness, shedding light on ecological challenges in the 21st century. The song's lyrics and imagery beautifully intertwine cultural identity and ecological resilience, emphasizing the importance of preserving both.

The song centersone of the concepts of Rueckert discusses in his essay: the first Law of Ecology- that 'everything is connected to everything else'. It also focuses on the hardships of marginalized communities and indentured laborers, whose lives are intricately linked to the environment they are living in.Rueckert agrees that the Western way of comprehending nature is anthropocentric and that this has led to a deep divide between nature and culture.

He argues that it should rather be symbiotic and that literature should devote efforts into stopping the destruction of the biosphere. He calls for a transformation in culture to foster a more

sustainable, ecologically sensitive model of growth. At the roots of such a model is literature, with its creative, transformative energy. In *Enjoy Enjaami* the makers present a community that celebrates the connections between humans and nature. *Enjoy Enjaami* blends elements of Tamil folk music known as *oppari* with hip hop.

Oppari is an old mourning song. *Oppari*, a type of folk music, is crucial for teaching younger generations the values of sustainable development that rural communities uphold. These cultures' oral traditions are full with themes related to ecological sensitivity, like taking only what is necessary, realizing that the land belongs to more than just humans, and pointing out the injustices caused by anthropocentric development paradigms. "Nayi Nari Poonaikundhan Indha Erikkolam Kooda Sondhammadi," which Dhee sings in *Enjoy Enjaami*, means that even dogs, cats, and foxes own the ground. The song honors the oral tradition by highlighting how unfair and harsh a human-centric vision of progress can be.

Enjoy Enjaami serves as an example of the apperception process, first described by McHarg and then explored by Rueckert. Transmuting creative energy into information and that information into meaning is the act of perception. To describe the function of ecological poetics, Rueckert talks about the idea of perception. This involves taking the creative energy that is contained in a poem, reading, writing, and teaching it into meaning, and then applying that meaning to the development of an environmentally conscious value system. The song "*Enjoy Enjaami*" incorporates the importance of going back to a previous set of ideals that gave priority to environmental awareness. Viewers found the song to be very popular, and this popularity changed. The song was widely liked by the audience, and this led to more people talking about India's environmental issues.

The song included subaltern and postcolonial narratives as well. The experiences of indentured servants and other oppressed individuals who were forcibly removed from their homes were highlighted. The declaration of their identity, which is inextricably linked to their ancestral regions, is Enjoy Enjaami. The song demands equality for all living things on Earth, not just humans. It is noteworthy that Enjoy Enjaami's subaltern viewpoint harmoniously integrates into its broader Eco critical framework. The Dalits and other vulnerable communities, as well as the earth workers and laborers, were among the first individuals to be celebrated in the song.

Enjoy Enjaami is an appeal to appreciate nature and all it has to offer while showing consideration for all living things. The first Law of Ecology, as discussed by Rueckert, is centered around the topic of whose land it is and the conclusion that it belongs to everyone. This is the concept the song conveys, and the foundation of the moral code it promotes is equality.

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THE DAY AFTER TOMORROW: AN ECOLOGICAL STUDY

Kiran Jenifer Y

Human beings have always been interested in the fields of science and environment, whether to survive or for development. It is inevitable that humans used fire and other environmental tools as a necessary step to survive, followed by civilization, industrialization, and many more, from development to demolition. The population of human beings, a major factor that contributes to the changes in the environment, has been recorded in the writings of many philosophers of the ancient period, except they did not have the name for it, the word ecology. Ecology is a word that is said to be derived from the Greek word "okios," which means house or a place to live. It is defined as the scientific study of interactions between organisms and their environment. Many discoveries have been made about the tremendous effects of the various developments that mankind has exhibited on earth; we call them environmental issues. The question is: with all these discoveries and developments contributing to ecological demolitions, does it have a major impact that even half of the Homosapiens might get swapped away? Hopefully not, but practically especially in 21st century, the probability of this just gets

higher and higher each year. The Day After Tomorrow is a movie that articulates the causes of environmental issues in a slightly exaggerated way, but its underlying scientific relationships are not pseudo-scientific. The climatic destruction and the human behaviors that triggers it are the important aspects that have to be studied, considering the series of crises that we as humankind are witnessing right now. In this paper, the study of human relations with environmental issues has been widely examined in context with the movie The Day After Tomorrow.

The Day After Tomorrow by Roland Emmerich is a fictional movie that was released in the United States on May 28, 2004. It is a science fiction that portrays the possible impacts of the climatic changes that might occur due to the rapid melting of polar ice, which is brought on by global warming.

IMPACTS HAPPENED IN THE MOVIE AND ITS SCIENTIFIC

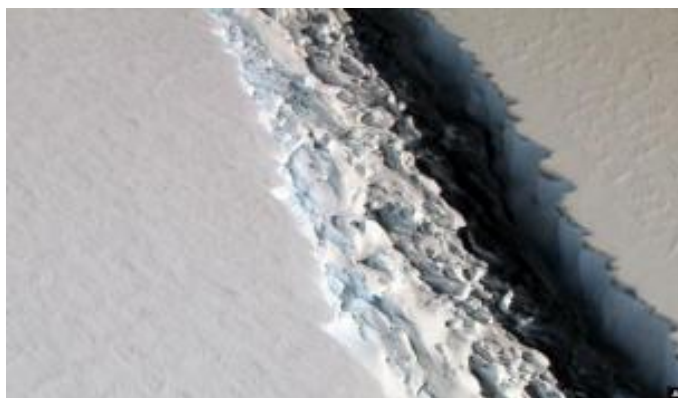
BACK UP: Thermohaline Cycle:

To put it in a simpler way, it is a sort of mechanism of nature carrying warm water from the equator to the North Pole and to several parts of the world called the AMOC cycle, which is mainly driven by two important factors: temperature and salinity, which is the very name of this process, the thermohaline cycle. AMOC is part of the thermohaline cycle.

Ice break:

(Figure 1: Antarctica Larsen Ice Shelf Crack: This Nov. 10, 2016 aerial photo released by NASA, shows a rift in the Antarctic Peninsula's Larsen C ice shelf. (Photo Courtesy NASA) The movie starts with a few people working in an ice cap, which tends to break and leave the workers astonished. Though this film is mere science 'fiction, there are certain scientific aspects that leave us into thinking. The ice breakage that has been shown in the movie has happened in real life too (refer to Figure 1). However, there isn't much of an impact from this ice breakage, but one cannot assure that it might not happen in the future. So, this part of the movie, which is the starting scene, is so important that it sets the entire plot for the movie. After the ice break

scene, there is a global warming climatologist how the world age because of climatologist in



UN conference on in New Delhi, where Jack Hall explains could enter a new ice global warming. The the movie mentions

quite a few human practices that have a threatening effect on the environment. However, the explanation of the climatologist's view of North Atlantic currents being disturbed gives an overview of the science behind the ice age modern humans are triggering. He states that the heat from the sun lying on the equator is carried north by the ocean, but global warming, which is

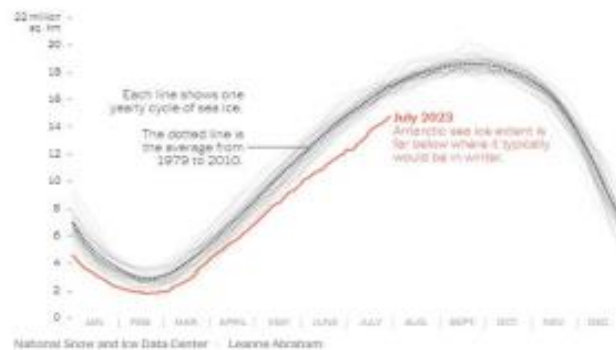
melting the polarized caps, disturbs this flow, and eventually, when it shuts down, it causes major climatic changes. So, this cycle that the movie is talking about is called the AMOC cycle, which is part of the thermohaline cycle. The major factor that could contribute to the breakage of ice is an increase in greenhouse gases, which leads to global warming.

It is said that greenhouse gases are the most significant ones that have driven climate change since the mid-20th century. Global greenhouse gas Emissions such as emission of greenhouse gases since 1990 to 2015 from human activities have been increased by 43 percent. Three-fourths of total emissions are contributed by emissions of carbon dioxide, which

increased by 51 percent over this period. The majority of the world's emissions result from transportation, electricity generation, and other forms of energy production and use. Atmospheric concentrations of greenhouse gases, such as the concentration of carbon dioxide, have increased in the atmosphere since the start of the industrial era.

Temperature

Followed
movie brings out
impact: a
However, this



drop:

by the ice break, the
another possible
temperature drop.
temperature drop

will be considered an error. These sudden drops in temperature will occur in more than three places, triggering a series of climatic disasters like hurricanes, earthquakes, tsunamis, and finally the Ice Age. Temperature drops could be influenced by a lot of things. One such reason is the formation of sea ice. The formation of sea ice is very important because of its ability to trap warmth in the sea. The reduction in the formation of sea ice because of global warming would

ultimately have an effect on the amount of warmth that the ocean might trap. To prove this theory, we can talk about the sensors that were taken in July 2023, where a significant amount of sea ice has been reduced comparatively. Refer to Figure 2.

Sea ice is generally said to be a protective layer for glaciers. The reduction in sea ice will result in the depletion of glaciers, which will in turn release a large amount of fresh water into the ocean, provoking an ice age.

Ice Age:

Numerous theories have been proposed about the Ice Age that humans are going to enter. One of the theories is the destruction of the thermohaline cycle, which aligns with the theory that this movie has proposed, the thermohaline cycle. Disruption in the cycle will result in the stagnation of the warm water in the equator and cold water in the poles, this will ultimately drive the ice covers of the poles to extend vastly leaving the earth in a cold atmosphere and gradually setting it on Ice Age. Studies have been made on the previous Ice Age that homosapiens entered into 100,000 years ago. It is said that there is a lot of evidence stating that the ice age that happened years ago completely slowed down this cycle, and this has been explained in a news article released in the New York Times. Further in the article Steven

Goldstein, a geochemist at LDEO says "Our discovery of such a major breakdown in the ocean circulation system was a big surprise. It allowed the ice sheets to grow when they should have melted, triggering the first 100,000-year cycle". So, there is a possibility that this cycle might slow down or even shut down, which might result in a new ice age. After all, nature is surely unpredictable. Conclusion:

In conclusion, this movie plays a major role in stating the facts involved with global warming and its possible impacts. One important and most interesting detail that has been portrayed in the final scenes of the movie—to say it in other ways, it would be the heart of the movie where the astronauts from outer space would be looking at earth and one of the astronauts says “I have never seen air so clear”, It surely sets a remarkable stand on the entire

concept of the movie. All of these earthquakes and cyclones and this ice age are what humans have to encounter to have a pollution-free atmosphere. then we leave no choice for the earth. A solid thought that spoke about humans' behavior towards the earth is something that has to be said in a way humans remember. And the movie, *The Day After Tomorrow*, played its part perfectly.

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Ecological Challenges Of 21st Century In “The Drowned World”

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MA ENGLISH 1ST YEAR

ABSTRACT:

Ecological challenges encompass a range of environmental and sustainability issues that impact the ecosystems, biodiversity, and overall environmental well-being of our planet. In the 21st century, these ecological challenges remain a pressing concern as the world grapples with a complex and interconnected web of environmental problems.

Written by J.G. Ballard in 1962, "The Drowned World" is a work of post-apocalyptic science fiction. The novel is set in the year 2145, portraying a world submerged in floods resulting from climate change. The central character, Dr. Robert Kerans, is a biologist participating in a scientific expedition aimed at studying environmental transformations.

"The Drowned World" stands as a remarkable example of science fiction literature, offering a vivid and imaginative portrayal of a society confronting natural crises.

KEYNOTES

Ecology, environment, climate change, global warming, drowning world, submerging.

INTRODUCTION

In the 21st century, humanity faces an array of pressing ecological challenges that have captured the collective consciousness of societies across the globe. As we confront the increasingly dire consequences of climate change and environmental degradation, the relevance of J.G. Ballard's 1962 science fiction novel, "The Drowned World," has become strikingly apparent. This seminal work offers a prophetic exploration of a world transformed by climate change, where a once-familiar landscape, in this case, London, has succumbed to rising sea levels and has been submerged beneath the ocean. As such, "The Drowned World" serves as a powerful and thought-provoking allegory for the ecological challenges of the 21st century, offering insights into the consequences of climate change and the unpredictable alterations to Earth's ecosystems.

This research paper delves into the ecological challenges of the 21st century as depicted in "The Drowned World," shedding light on how the novel's narrative and themes can be interpreted as a reflection of contemporary environmental concerns. Through an analysis of the novel's portrayal of a climate-altered world and its effects on both the natural environment and human society, this paper aims to draw parallels between Ballard's fictional vision and the real-world ecological challenges of our time. By doing so, it seeks to illuminate the novel's enduring

relevance in the context of modern environmental discourse and the urgency of addressing the ecological issues that shape our world today.

ECOLOGICAL CHALLENGES OF 21ST CENTURY:

Environmental issues encompass the adverse consequences of human actions on the natural world.

Some of the pressing contemporary environmental problems that demand immediate attention are as follows:

Climate Change: In the present context, climate change stands out as a paramount concern. It has emerged prominently over the past few decades, largely driven by the release of greenhouse gases. The repercussions of environmental shifts are far-reaching, including phenomena like glacier melt, alterations in seasonal patterns, and the escalation of diseases.

Global Warming: The accumulation of greenhouse gases resulting from activities such as the combustion of fossil fuels, vehicular emissions, and the use of chlorofluorocarbons has led to an increase in the Earth's temperature, commonly referred to as global warming.

Ozone Layer Depletion: The ozone layer, a critical layer of concentrated ozone gas, shields us from harmful ultraviolet radiation from the sun. However, this vital protective layer is deteriorating due to substances like chlorofluorocarbons (CFCs) used in industries and everyday products (e.g., aerosol cans). The chlorine in CFCs is responsible for the destruction of the ozone layer, resulting in an ozone hole and exposing both humans and wildlife to harmful UV rays, which can lead to skin diseases, including cancer.

Water Pollution: Water pollution occurs when hazardous substances are introduced into rivers, oceans, lakes, and ponds, causing physical, chemical, or biological changes in the water. This pollution depletes oxygen in water bodies, leading to the death of aquatic organisms. Since water is essential for life, it is our foremost responsibility to safeguard it from pollution.

Air Pollution: Emissions from industries, vehicles, and the increased use of fossil fuels have given rise to air pollution. Gaseous emissions have contributed to global temperature increases and heightened health risks for individuals.

Solid Waste Management: Solid-waste management encompasses the proper handling of solid waste, from its generation and storage to collection, transfer, processing, and disposal. It aims to ensure that waste disposal methods do not have harmful effects on the environment.

Deforestation: Deforestation involves the rapid depletion of forests and trees, which play a vital role in providing oxygen, raw materials, and regulating the Earth's temperature. Commercial deforestation has significantly altered the planet's climate and caused the loss of various plant and animal species, adversely affecting biodiversity.

Overpopulation: The global population is burgeoning, with estimates exceeding seven billion. This population growth has led to resource scarcity, and if the trend continues, sustaining such a vast population will become increasingly challenging. Overpopulation is closely linked to other environmental issues, including pollution, waste management, deforestation, climate change, and global warming

JG.BALLARD THE AUTHOR OF THE DROWNED WORLD:

J.G. Ballard, a celebrated author, is best known for his non-genre autobiographical novel "Empire of the Sun." However, the majority of his literary work falls within the science fiction

realm, albeit in a manner that defies easy classification. Even in his most speculative works, clear genre labels don't quite fit, and his more mainstream writings consistently incorporate elements of fantasy and speculation. Ballard was a short story writer, a period that climaxed in 1960, *Set* amid desert landscapes, in a moodily-depicted near-future world situated in a larger, declining universe.

J.G. Ballard became closely linked with the New Wave movement of science fiction early in his career, primarily through his apocalyptic or post-apocalyptic novels, which included "The Drowned World" (1962), "The Burning World" (1964), and "The Crystal World" (1966). However, in the late 1960s and early 1970s, Ballard shifted his focus to a diverse collection of short stories often described as "condensed novels," as seen in works like "The Atrocity Exhibition" (1970).

In Ballard's literary works, he explores and criticizes the changing nature of media, providing perspectives on how we experience the "natural" world and climate change. His characters often gravitate toward environments where they undergo disruptions, allowing them to reevaluate their connection to time on a larger scale, be it in evolutionary, geological, or cosmic terms. This aligns with the imperative of the anthropogenic concept, urging us to reexamine our relationship with time.

THE DROWNED WORLD:

The novel opens with a grim anticipation of increasing heat. Dr. Kerans stands on the Ritz hotel balcony, observing the altered sun and vegetation in a world shaped by environmental catastrophe. His usual routine is disrupted as he contemplates his detachment from the military unit he's part of. Kerans enjoys the solitude of the luxury hotel as he contemplates the

transformation of the world outside. His relaxed demeanor contrasts with the unsettling changes in the environment and his own appearance, marked by bleached hair and sun-damaged skin.

Riggs often seeks Kerans' help in evacuating the last residents of submerged European cities. Kerans, a medical doctor, finds Riggs intelligent and friendly but hasn't shared a particular joke. As they prepare for an evacuation, Kerans invites Riggs for a drink and humorously implies he should check the Hilton for room availability. Kerans prefers solitude, akin to animals undergoing transformation, which makes him wonder about his own changes.

When Riggs asks if Kerans listens to the radio, Kerans rejects the idea, saying they know the future for the next three million years. Riggs surprises him with news of their imminent departure to Camp Byrd due to extreme heat, alongside American and Russian units. This perplexes Kerans, who finds solace in the Ritz's comfort.

The purpose of Riggs' visit is revealed: persuading Beatrice to leave. Kerans acknowledges her complexity and unusual behavior. They depart on a cutter, and Riggs comments on the bewildering nature of their work and the impending chaos in Europe. Riggs asks about Kerans' sleep, leading to a puzzled response.

As Kerans observes from the catamaran, numerous iguanas perch on the windows of submerged office buildings and department stores. He reflects on his lack of interest in identifying the drowned cities they visit, despite finding them enchanting. In contrast, biologist Alan Bodkin, much older than Kerans, has lived in many of these cities and seeks out familiar places from his memories. The absence of personal connections to these sinking civilizations makes Kerans indifferent to their fate, except for a few older individuals who recall their past life in these cities.

The story traces back to "geophysical upheavals" that began six to seven decades earlier, triggered by solar storms depleting Earth's protective barrier against solar radiation. This led to a gradual rise in temperatures, rendering tropical regions uninhabitable, and causing human populations to migrate towards the poles. Life adapted to the changing climate, giving rise to new plant species, while the polar ice caps started melting into the oceans. Mammal fertility decreased, while amphibians and reptiles thrived and adapted to aquatic life.

Kerans and Riggs arrive at the testing station, where they find Beatrice Dahl. She appears unhappy, likely due to Riggs forcing her to accept their departure. Kerans tries to persuade Beatrice to listen and comply with the plan, but she remains dismissive. After Riggs explains the situation to her, Kerans inquires about her motives. Beatrice and Kerans are left alone, and she suggests they stay together, referencing her apartment that has sentimental value. Kerans reminds her that if Riggs departs without them, it means they will stay, not leave. Beatrice also mentions her recent nightmares.

Kerans returns to the base's landing stage, glimpsing Beatrice on the balcony. He resolves to maintain the illusion that he and Beatrice will leave with the others. Inside the armory, he notices the stockpile of ammunition and weapons, pocketing a compass before leaving.

In the sick bay, Kerans finds Lieutenant Hardman, who exhibits signs of malaise and insomnia similar to Kerans. He leaves Hardman under Bodkin's care, and Hardman reveals that listening to a record is a waste of time. Bodkin and Kerans discuss an experiment they were conducting, and Kerans unintentionally mentions the imminent departure in three days. He later regrets revealing this information and questions Bodkin about their experiment. Bodkin introduces the concept of "Neuronics," a new psychology explaining the impact of evolving flora

and fauna on humans. Kerans contemplates the validity of this theory. Kerans takes out the compass he stole from the armory and ponders his motives and the inevitable consequences of his action.

Kerans, Beatrice, and Bodkin remain in London as Strangeman damns the lagoon and drains the water. Strangeman's crew captures Kerans and tortures him. Eventually, Kerans escapes and reunites with Beatrice. Riggs and the army arrive, and Kerans tries to flood the lagoon but is shot by Macready. The water rushes in, upturning Strangeman's boat. Beatrice urges Kerans to leave, and he escapes on a raft.

Kerans travels south, his gunshot wound worsening. He encounters the blind and emaciated Lieutenant Hardman, whom he cares for briefly before Hardman disappears. Kerans continues his journey, marking his well-being on an apartment wall. He heads south, searching for forgotten paradises.

THE DROWNED WORLD AS POST APOCALYPTIC AND CLIMATIC FICTION

Post-apocalyptic literature is a genre that explores human responses to a global catastrophe leading to widespread death and societal collapse. While the nature of this catastrophic event can vary, it is typically characterized by the demise of many individuals and the disintegration of established society. Post-apocalyptic fiction can be set in the aftermath of scenarios like nuclear warfare, deadly pandemics, zombie outbreaks, environmental disasters, or extraterrestrial invasions. In this genre, the specific trigger of the disaster often takes a back seat to the examination of how survivors navigate their existence in a transformed world.

J.G. Ballard, a pioneer in the post-apocalyptic dystopian genre, explored the impact of climate change in his 1962 novel "The Drowned World," long before climate fiction, or climatic-

fiction, became widely recognized. Ballard's work influenced many contemporary authors in the genre. Climatic-fiction, characterized by its imaginative exploration of climate change's effects, often evokes an anxious, dystopian mood.

Climate fiction overlaps with post-apocalyptic fiction, where civilization has collapsed, although the latter has ancient mythological roots in apocalyptic floods and catastrophes. Ballard's "The Drowned World" highlights the impact of natural events on Earth's climate, causing inhospitable conditions for humans.

HUMAN VERSUS NATURE IN *THE DROWNED WORLD*:

In "The Drowned World," nature is depicted as a powerful force with its own consciousness. This portrayal emphasizes humanity's helplessness in the face of uncontrollable environmental changes caused by solar radiation. The characters, including Dr. Bodkin and Kerans, acknowledge their role as observers rather than controllers of these changes. When Strangeman arrives, he challenges this perspective by actively shaping the environment, draining a lagoon and returning London to its former state. However, this control over nature is short-lived, as Dr. Bodkin and Kerans resist it, believing that humans must accept nature's dominance. The novel conveys the idea that humans cannot truly control nature, and the concept of "man versus nature" is fundamentally flawed, as nature ultimately prevails.

WORLD TOWARDS FAILURE

In the novel global water levels have risen and all cities south of the Arctic Circle are underwater. The year is 2145 and few people remember what the world was like when humans lived in the cities of Europe and America.

The world's transformation in the novel reflects the consequences of humanity's failure to confront climate change and ecological decline, serving as a cautionary message about the possible breakdown of societies in the face of environmental crises.

In today's world, similar concerns exist regarding our inability to effectively tackle climate change, deforestation, biodiversity loss, and other environmental issues. "The Drowned World" acts as a warning that aligns with these modern apprehensions, underscoring the urgency of taking proactive steps to avert devastating environmental breakdowns.

THE ECOLOGICAL CHALLENGES OF 21 CENTURY AS IT IS IN THE DROWNED WORLD

The recent reports on the accelerated melting of glaciers and the alarming climate change indicators mirror the themes explored in J.G. Ballard's novel "The Drowned World." In the novel, the world has already suffered significant environmental changes, and the characters grapple with the consequences of these changes.

The world's glaciers melted at dramatic speed last year and saving them is effectively a lost cause, the United Nations reported, as climate change indicators once again hit record highs. The UN's World Meteorological Organization said that the last eight years have been the warmest ever recorded, while concentrations of greenhouse gases such as carbon dioxide hit new peaks.

The October 2023, WHO report reveals that climate change is already affecting 3.6 billion people, potentially causing 250,000 additional annual deaths from various health issues between 2030 and 2050. Climate change also strains healthcare systems and degrades environmental and social factors that impact physical and mental health. Urgent action is needed to prevent increased health risks, protect global health gains, and uphold the right to health for

all. The report underscores the broader consequences of climate-related events and stresses such as shifting temperature and precipitation patterns, droughts, floods, and rising sea levels. These factors degrade both environmental and social determinants of physical and mental health. Climate change affects all aspects of health, encompassing clean air, water, soil, food systems, and livelihoods.

According to CBS, Himalayan glaciers are melting at an unprecedented rate, with scientists warning that this will have widespread repercussions. The Himalayan-Karakoram-Hindukush (HKH) region, which stretches over 2,175 miles from Afghanistan to Myanmar, houses the world's highest mountains, including Mount Everest. The melting glaciers in the Himalayas would spell disaster for around 240 million people living in the HKH region and an additional 1.65 billion people downstream. This rapid glacial melt is expected to lead to severe weather events with far-reaching consequences.

The recent article in Live Mint highlights the alarming projections regarding rising sea levels and the potential impacts of climate change on coastal areas, particularly in cities like Mumbai, Kochi, Mangalore, Chennai, Vishakapatnam, and Thiruvananthapuram. The study by RMSI indicates that these critical properties and road networks in these cities may be at risk of drowning by 2050 due to sea-level rise. The article discusses how internal climate variability can exacerbate the rise in sea levels, potentially leading to a 20-30 percent increase in some locations. This increase in sea level rise, combined with climate change, could result in more frequent and extreme flooding events. As seen in the case of Manila, the study predicts that coastal flooding events could become 18 times more common by 2100 compared to 2006, primarily due to climate change.

These reports emphasize the urgent need for climate action and the importance of addressing the impacts of rising sea levels and extreme weather events, as highlighted in the context of J.G. Ballard's novel "The Drowned World." The real-world developments underscore the relevance of such concerns and the need to take measures to mitigate climate change and its consequences.

CONCLUSION

"The Drowned World" by J.G. Ballard, penned in 1962, presents a remarkable work of science fiction that remarkably foreshadows the ecological challenges of the 21st century. The novel provides an uncannily prophetic vision of a world profoundly impacted by climate change, where rising sea levels submerge major cities, forcing humanity to grapple with the dire consequences of environmental degradation. In a time when our planet is beset by issues such as climate change, global warming, glacier melt, ozone layer depletion, water and air pollution, solid waste management problems, deforestation, and overpopulation, Ballard's narrative emerges as a poignant allegory for the pressing environmental dilemmas we confront today.

"The Drowned World" serves as a stark warning, underscoring the imperative of taking proactive measures to tackle these ecological challenges head-on. It accentuates the potential calamities that may befall our planet and societies should we fail to confront these issues, mirroring the catastrophic world depicted in the novel.

The parallels between the novel's portrayal of a changing climate and the contemporary environmental issues are strikingly apparent. Recent reports regarding the alarming acceleration of glacier melting and the breaking of climate records closely resonate with the themes of the novel, accentuating its relevance in today's context. The alarming health warnings from

organizations like the WHO concerning the health repercussions of climate change underscore the widespread impacts of environmental shifts, which Ballard's work astutely anticipated.

As we bear witness to the real-world surge in climate change and its catastrophic aftermath, "The Drowned World" calls upon us to unite in the mission to safeguard our planet and secure a sustainable future for all. It is an eloquent reminder that the consequences of inaction in the face of ecological challenges can be nothing short of disastrous. Therefore, it is incumbent upon us to heed the profound lessons imparted by this thought-provoking novel and take immediate, concerted action to address the ecological challenges of the 21st century, for the window of opportunity to do so is fast closing.

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HUMAN BEHAVIOUR AND NATURE IN THE CHRONICLES OF NARNIA: PRINCE CASPIAN FILM

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ABSTRACT

The purpose of this study is to comprehend the complex relationship that exists between humans, animals and nature. Our ecosystem is our habitat and as humans, we must do everything in our power to maintain, safeguard and conserve our home.

The Andrew Adamson film; *The Chronicles of Narnia: Prince Caspian* served as the study's data source. There are many instances available that demonstrate the relation between human and nature as well as human nature. It is evident how little the characters were impacted and how simple it was for them to pick themselves over other living things out of self-interest.

KEYWORDS: Ecosystem, Humans, Animals, Narnia.

The Chronicles of Narnia: Prince Caspian is a high fantasy film (2008) directed by Andrew Adamson, who co-wrote the screenplay with Christopher Markus and Stephen Mc Feely. It was produced by Walt Disney Pictures and Walden Media, the second published and fourth chronological novel in the children's book series *The Chronicles of Narnia* by C. S. Lewis. The sequel to *The Chronicles of Narnia: The Lion, the Witch and the Wardrobe* (2005), it is the second instalment in *The Chronicles of Narnia* film series.

In the film, the connection between nature and the plot is significant. The film makes a strong connection between the general wellbeing of the land and the condition of Narnia's natural environment. Nature and health are interconnected in more ways than one. Nature, in its own way has a calming effect on both our body and mind, and those two are equally important.

Studies have shown that exposure to natural environments can have a relaxing effect on our minds by lowering stress levels. Additionally, it has been found that greenery stimulates our bodies to release endorphins. It improves our mood and significantly lessens anxiety and depressive symptoms. This indicates the ultimate connection between the ecosystem and human health.

Narnia is portrayed at the opening of the movie as a realm where nature is dying. The natural and magical aspects of the land have been repressed and oppressed by the Telmarines, who have ruled Narnia for many years, which has caused the ecology to deteriorate. This decline in Narnia's natural world is symbolic of the broader decay and corruption in the kingdom.

Almost 1,300 years after the Pevensie siblings left, Caspian, a Telmarine prince, is awoken by his mentor Doctor Cornelius, who informs him that his aunt has just given birth to a son and that he is now in serious danger for his life. Offering him Queen Susan's old magical horn, Cornelius advises him to use it only when he is in dire need. Caspian runs away, knowing that his Uncle Miraz will kill him to become king. The Prince stumbles off his horse while being chased by multiple Telmarine soldiers and finds himself in the woods where he meets a talking badger and two Narnian dwarfs. After giving his life to save Caspian, one of the dwarves, Trumpkin, is taken prisoner by the soldiers; however, Caspian is saved by the other dwarf, Nikabrik, and the badger, Truffle Hunter. Caspian blows the magical horn in an attempt to call for help, not realizing that they are trying to save him.

In England, the four Pevensie children wait at the Strand tube station for their train which will take them to boarding school. One year has passed in their world after they left Narnia. Just

as the train pulls into the station, the station tears apart, transporting them back to Narnia. There, they discover their castle, Cair Paravel, was attacked and ruined in their absence.

The Pevensie siblings and Prince Caspian strive to restore the natural world as their story continues, by reclaiming Narnia together. A revival of nature is brought about by the appearance of magical creatures, talking animals, and the return of Aslan, the lion that represents the spirit of Narnia.

Based on Andrew Adamson's film *The Chronicles of Narnia: Prince Caspian*, this study addresses ecological challenges and employs a qualitative descriptive method. This theory examines how human action leads to ecological problems and damages the world of Narnia.

Two types of sources of data were used in this study: primary and secondary sources. The main information for this study was gathered from the characters, action, language, and images in the film. The secondary data used to support the study's conclusions was taken from articles, books, and journals. The purpose of this study aims to understand the connection that exists between humans, animals and nature as well as human nature.

In the midst of World War II, the movie opens in a London train station. A strange power unexpectedly takes the Pevensie siblings - Peter, Susan, Edmund, and Lucy - to the land of Narnia while they wait for their train.

There is a significant shift in mood. They stand on a stunning beach that is lit up by the sun. The ocean's azure waters shimmer beneath a clear blue sky, while golden dunes extend in all directions. There is a stark difference between this new, magical world and their reality through the war. They are overwhelmed with wonder and amazement as they take in their surroundings.

Magnificent cliffs encircle the beach, and the whole area exudes peace. This shows how nature/sea can directly affect humans, whether they realize it or not.

Many people find the sea to be exciting and magical, and some think it has a restorative quality. Scientists continue to prove that this is true - being near water revitalizes the body and mind and lowers stress and anxiety. Water has a psychologically restorative impact; spending time near the water is often associated with increased stress reduction and pleasant mood. Our brain wave frequency can be altered only by gazing out to sea, which can induce a light form of meditation.

The colour blue is linked to emotions of tranquillity and calmness, and the sound of the sea's surge and wave motion naturally calms and relaxes the brain. The increased amounts of Vitamin D, or sunshine vitamin, that seep into our skin make us feel good. The fresh, salty sea air is rich of negative ions, which are thought to help reduce depression. Entering the water pulls you inside it and makes you fully aware of the taste, feel, sound, and strength of the ocean; you are no longer simply observing nature.

When Caspian's uncle, Miraz says "I will cut down the entire forest if I have to, to find the prince" it conveys disregard and a sense of ruthless determination for nature in the pursuit of his goals.

Miraz's intention to clear the entire forest serves as an example for a larger issue of environmental exploitation by humans for their own benefit. Real-world problems with habitat destruction, deforestation, and the effects of human activity on natural ecosystems are reflected in this theme.

The beautiful and mystical land of Narnia is portrayed as one that values nature and all of its inhabitants. The Pevensie siblings and Prince Caspian are among the many Narnians who have a close bond with the land and its people. Narnian morals are directly at conflict with Miraz's disrespect for the forest and his desire to damage it for his own gain. Top of Form

When deforestation occurs, much of the carbon stored by trees is released back into the atmosphere as carbon dioxide, which contributes to climate change. The World Health Organization (WHO) has described climate change as one of the greatest health threats of the 21st century. Pollution, overexploitation of the environment, habitat change, and climate change are some of the factors contributing to biodiversity loss.

When forests are cleared, the carbon that they have stored is released into the atmosphere, exacerbating global warming. The loss of trees and other vegetation can cause environmental change, desertification, soil disintegration; fewer harvests, flooding, expanded ozone depleting substances in the air, issues for Indigenous people, and also affect global mental health.

Miraz's choice to chop down trees in order to construct bridges in preparation for his attack on the Narnians demonstrates his vicious and hostile personality. Despite the expense, he will not compromise the environment in order to accomplish his armed forces and political goals.

These acts represent a disregard for the natural world and the environment. Without considering the long-term ecological effects or the damage done to the Narnian land, he intends to exploit the forest's resources.

His actions show a lack of perspective since they put the short-term military advantage ahead of the long-term welfare of the land and its people. It depicts a typical conflict that exists

in real life between the preservation of natural ecosystems and human short-term objectives. The world of Narnia is portrayed as one in which nature and all living things are cherished and appreciated. The Narnians live in harmony with the environment and have a strong bond with the land. His exploitation of the forest runs opposed to the principles of Narnians.

Miraz's acts represent his despotic authority. The utter destruction of the forest is an illustration for his despotic regime, which is prepared to jeopardize the welfare of the land and its people in order to promote its own interests. His desire to destroy trees in order to construct bridges and launch an attack on the Narnians highlights issues of environmental exploitation, pride, and the conflict between his cruel ambition and the more peaceful beliefs of Narnia.

Top of Form

In the last majestic battle, between the Narnians and Miraz and his army, nature and its inhabitants turn into allies. A natural shield between the Telmarines and their intended targets, the forest and the river unite to keep the Narnians safe.

The river that runs near the battlefield comes to life. The water pours towards the Telmarine warriors, rising in towering waves that surround them, forcing them back and scattering their forces. At the same time, the ancient trees that encircle the battleground become awake and start to pull themselves up. They advance with great strength, their enormous roots and branches acting as powerful weapons against the Telmarines.

As they attempt to cope with the fury of the Narnian elements that have come to life, the Telmarines are left in a state of disbelief and disorientation.

The scene is crucial to the plot because it highlights the ethereal and ancient aspects of Narnia and the notion that the natural world defends its people when they are most in need. They aid, guide, and even engage in battle together with the protagonists.

The once-majestic landscapes of Narnia had lost their magical vitality due to human intrusion. The magical realm of Narnia had been exploited and neglected, portraying a world in danger as a result of its inhabitants' careless actions. But in the final moments of the film, the true nature of the natural world starts to come into focus.

It becomes clear that nature is answering the call for aid by itself. The entire structure of Narnia comes alive as the earth trembles, trees rise, and waters surge. This resurgence is evidence of nature's tenacious and robust character.

Nature can heal itself and protect those who appreciate and cherish it, as evidenced by the once-withered trees that instantly burst forth with lush leaves and blossoms, the rivers that flow with renewed strength, and the animals that return to the wild.

The idea that the welfare of the natural world and the welfare of the kingdom are inextricably intertwined is generally reinforced by the connection between nature and the storyline in "Prince Caspian." The return of Narnia and its nature go hand in hand, highlighting how crucial it is to protect the environment and coexist peacefully with it.

The mystical and magical qualities of the land are symbolized by the natural components found in Narnia, such as the river deity and the ancient trees. Their rejuvenation symbolizes the return of Narnia to its true nature, and they stand for the harmony and balance that Narnia is meant to have.

The movie highlights the idea that nature is not just a passive backdrop but an active and powerful force that can aid in the fight for justice and freedom.

The characters are amazed and awed by this amazing transformation. They realize that nature has the innate ability to recover its previous magnificence and protect those who stand with it, in spite of the damage done to the land. It turns into a poignant message that there is reciprocity in our relationship with the natural world; when we take care of and nurture it, it takes care of and nurtures us as well.

This compelling message aligns with the notion that we can still find redemption and restoration in the arms of a resilient and caring nature, regardless of the extent to which we damage our surroundings. It emphasizes how crucial it is that we safeguard the natural environment and live in harmony with it.

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A GREEN MESSAGE DEFORESTATION; BOONIE BEARS

Dhrisya .T.D, Sneha.R

Abstract:

"Boonie Bears" is a popular Chinese animated television series that delivers an important environmental message by highlighting the importance of saving forests. The show revolves around a group of lovable bear characters, known as the Broonie Bears, who live in a lush forest habitat. Their adventures are not just entertaining but also educational, as they teach young viewers about the significance of environmental conservation. In a world where deforestation and environmental degradation threaten the delicate balance of nature, the Broonie Bears serve as endearing ambassadors for the preservation of forests. Through their adventures, these animated bears convey the message of sustainable living, wildlife protection, and the necessity of safeguarding our natural resources. With humor and heartwarming stories, "Boonie Bears" encourages children and families to take action in their own lives to protect and save the forests, promoting a deeper understanding of the vital role forests play in our ecosystem and the importance of their conservation

KEYNOTES: Environmental Awareness, Deforestation, Environmental impact, Ecosystem

Introduction:

"Boonie Bears" is a Chinese animated television series that has captured the hearts of audiences, both young and old, with its delightful characters and meaningful messages. The show follows the adventures of a group of endearing bear siblings - Briar, Bramble, and their friends - in their lush forest home. Each episode combines humor, adventure, and important life lessons.

At the core of "Boonie Bears" is a strong emphasis on environmental awareness and conservation. The bear siblings act as role models, teaching viewers about the value of protecting

nature, respecting wildlife, and living in harmony with the environment. The series promotes sustainability and eco-friendly practices while maintaining a fun and entertaining narrative.

Importance of addressing deforestation:

In the present world, addressing deforestation is of paramount importance, and the animated series "Boonie Bears" effectively underscores this critical issue. With the global environmental challenges intensifying, the show serves as a Piteous reminder of the profound consequences of deforestation on our planet

By showcasing the charismatic Boonie Bears and their efforts to protect their forest home, the series illuminates the significance of preserving natural habitats and biodiversity. It highlights the direct correlation between deforestation and climate change, emphasizing the detrimental impacts on ecosystems, wildlife, and human communities.

In today's world, addressing deforestation is of paramount importance due to its far-reaching implications on the environment, society, and the global ecosystem. Deforestation contributes significantly to climate change, as trees play a crucial role in absorbing carbon dioxide and stabilizing the climate. It also leads to the loss of biodiversity, disrupting delicate ecosystems and threatening the survival of numerous plant and animal species. Moreover, deforestation can exacerbate soil erosion, increase the risk of natural disasters, and disrupt water cycles, impacting agriculture and human settlements

Overview of Boonie Bears:

"Boonie Bears" is a Chinese animated television series renowned for its captivating narrative and strong environmental themes. The show revolves around a group of adorable bear

siblings, Briar and Bramble, and their friends, as they embark on various adventures in their forest habitat. With a perfect blend of entertainment and education, the series imparts valuable lessons about environmental conservation, emphasizing the importance of protecting forests and wildlife.

Key Characters and plot:

Briar Bear: One of the main protagonists, Briar is a kind and adventurous bear who is deeply passionate about protecting the forest and its inhabitants.

Bramble Bear: Briar's brother, Bramble, is known for his mischievous and playful nature. Despite his playful antics, he learns valuable lessons about the importance of preserving the natural environment.

Logger Vick: Initially depicted as an antagonist, Logger Vick later transforms into a friend of the bears. He learns about the significance of protecting the forest and adopts sustainable practices, highlighting the potential for positive change.

The plot revolves around the bears' efforts to promote eco-friendly practices and educate others about the critical need for environmental conservation. Through their escapades and interactions with other forest inhabitants, the characters demonstrate the value of sustainability and responsible stewardship of natural resources.

Deforestation Crisis:

Deforestation remains a significant global concern, with alarming statistics underscoring its far-reaching impact. According to recent data, the world loses approximately 18.7 million

acres of forests annually, equivalent to 27 soccer fields every minute. This rampant destruction contributes to nearly 15% of global greenhouse gas emissions, exacerbating climate change. South America, particularly the Amazon rainforest, faces substantial deforestation, with an estimated 80% of deforestation being attributed to agricultural expansion.

Environmental Impact:

Furthermore, Southeast Asia witnesses a substantial loss of tropical forests due to industrial logging and the expansion of palm oil plantations. The consequences are dire, leading to biodiversity loss, soil degradation, disrupted water cycles, and an increased risk of natural disasters. Urgent action is imperative to address this crisis, emphasizing sustainable forestry practices, afforestation efforts, and global policy initiatives to curb deforestation and ensure the preservation of vital ecosystems for future generations.

Deforestation has profound environmental ramifications, including the loss of biodiversity, disruption of ecosystems, and soil degradation. It contributes significantly to climate change by reducing the Earth's capacity to absorb carbon dioxide, thus intensifying the greenhouse effect. The consequent alterations in rainfall patterns and water cycles exacerbate the risk of droughts and floods. This domino effect ultimately threatens the stability of various ecosystems, jeopardizing the well-being of both wildlife and human populations dependent on these intricate environmental systems.

Boonie Bears Environmental Message:

In "Boonie Bears," the characters actively engage in promoting environmental conservation and addressing deforestation. Through their adventures, they emphasize the significance of sustainable forestry practices, wildlife protection, and the importance of

preserving natural habitats. The show educates its audience, particularly children, about the detrimental impacts of deforestation while advocating for responsible land management. By showcasing the consequences of environmental degradation and fostering a deeper understanding of conservation efforts, "Boonie Bears" effectively encourages viewers to prioritize and actively participate in protecting the environment.

"Boonie Bears" has several key episodes that focus on the issue of deforestation. One notable episode might depict the bears' efforts to thwart illegal logging activities threatening their forest home, highlighting the detrimental effects of deforestation on wildlife and the ecosystem. Another episode could showcase the consequences of deforestation on local communities, emphasizing the importance of sustainable forestry practices and reforestation initiatives. Additionally, an episode might feature the bears collaborating with other forest inhabitants to raise awareness about the critical need to preserve and protect their natural habitat from further destruction

Environmental Lessons:

"Boonie Bears" imparts crucial lessons and values, emphasizing the significance of environmental stewardship, teamwork, and empathy. The series promotes the importance of sustainable living, wildlife protection, and the preservation of natural habitats. It instills in its audience a deep appreciation for nature and the need for responsible ecological practices.

The lessons promoted by "Boonie Bears" resonate with real-world environmental challenges, emphasizing the urgency of addressing issues such as deforestation, habitat destruction, and biodiversity loss. By highlighting the consequences of unsustainable practices, the series underscores the need for global action to protect natural resources and mitigate climate

change. It encourages viewers to adopt eco-friendly behaviors, support conservation efforts, and advocate for policies that prioritize environmental sustainability. Through its relatable narratives, "Boonie Bears" fosters a sense of responsibility and empowers individuals to contribute to the preservation of our planet for current and future generations.

Impact and Influence:

"Boonie Bears" has had a significant impact on its audience by fostering a heightened awareness of environmental issues and promoting a sense of responsibility towards nature. Through its engaging storytelling and relatable characters, the series inspires viewers, particularly children, to become active participants in environmental conservation. It instills a deep appreciation for the natural world and encourages individuals to make conscious choices that positively contribute to the preservation of the environment.

While specific statistical data on the series' influence is not readily available, anecdotal evidence and testimonials suggest that "Boonie Bears" have played a pivotal role in raising environmental consciousness among its viewers. Reports indicate increased awareness and engagement in environmental activities, including tree planting campaigns and community-based conservation efforts, particularly among younger audiences inspired by the show's messaging. This impact underscores the series' effectiveness in shaping attitudes and behaviors towards sustainable living and environmental stewardship.

Global Efforts in Deforestation Prevention:

Global efforts to combat deforestation have gained momentum through various initiatives, including international agreements, such as the UN's Reducing Emissions from Deforestation and Forest Degradation (REDD+) program. Additionally, reforestation projects,

sustainable forestry certification programs, and advocacy for responsible land management have contributed to mitigating deforestation. Collaborative efforts between governments, NGOs, and local communities have led to the implementation of policies aimed at promoting sustainable forestry practices, afforestation, and the conservation of critical forest ecosystems worldwide.

Collective action is paramount in addressing complex global challenges, such as deforestation and climate change. When individuals, communities, governments, and organizations unite, their combined efforts yield greater impact. Together, they can enact policies, drive sustainable practices, and affect meaningful change. By working collectively, we can protect our planet's future, preserve ecosystems, and create a more sustainable and resilient world for all.

Conclusion:

We discussed the impact and significance of the Chinese animated series "Boonie Bears" in promoting environmental consciousness and addressing deforestation. We highlighted how the series effectively conveys valuable lessons on environmental conservation, sustainable living, and the protection of natural habitats. Moreover, we explored the broader context of global initiatives aimed at combating deforestation and emphasized the importance of collective action in addressing pressing environmental challenges. "Boonie Bears" serves as a compelling medium to inspire positive change and foster a deeper understanding of the critical need for environmental stewardship.

Let's take a collective stand to save our planet. Embrace sustainable living, support reforestation efforts, and advocate for eco-friendly policies. Small actions, from reducing carbon

footprints to promoting conservation, have a powerful ripple effect. Together, we can protect the Earth's precious resources and ensure a healthier, greener future for all

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- Boonie Bears was first shown in January 2012 and last shown in February 2022 and became the most popular children's show in China. More than 600 thirteen-minute episodes have been produced so far. The series is produced by Fantawild Holdings Inc.
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GIFTING NATURE WITH GREEN COMPUTING TO SAVE ENVIRONMENT

ZeenathFareen

This paper focuses on gifting nature with Green Computing to save the Environment.

Green computing is also “Green Technology”

The production and disposal of computers contribute to resource depletion and waste generation, putting a strain on our planet.

Introduction to the Environmental Impacts of Computers:

Computers have become an integral part of our daily lives, but have you ever stopped to consider the environmental impacts they have? This article aims to shed light on the various stages of a computer's life cycle and its consequences on the environment. From raw material extraction to end-of-life disposal, we'll explore the challenges and opportunities for managing these impacts in a sustainable manner.

Importance of Understanding and Managing Environmental Impacts:

Understanding and managing the environmental impacts of computers is crucial for several reasons. Firstly, the production and disposal of computers contribute to resource depletion and waste generation, putting a strain on our planet's limited resources. Secondly, the energy consumption of computers and data centers contributes to greenhouse gas emissions, exacerbating climate change. Lastly, improper management of electronic waste (e-waste) can result in toxic substances entering the environment, posing health risks to humans and wildlife. By gaining awareness and implementing sustainable practices, we can minimize these impacts and move towards a greener and more responsible use of technology.

The Life Cycle of Computers and its Environmental Consequences:

Extraction of Raw Materials:

The first stage in a computer's life cycle is the extraction of raw materials, such as metals and minerals. This process often involves destructive mining practices and can lead to deforestation, habitat destruction, and water pollution.

Manufacturing and Assembly:

During the manufacturing and assembly phase, large amounts of energy and water are consumed, and chemicals are used in various processes. These activities contribute to pollution and resource depletion, and the disposal of manufacturing waste poses further environmental challenges.

Use Phase and Energy Consumption:

The use phase of computers accounts for a significant portion of their environmental impact. The energy consumption of computers and data centers contributes to carbon emissions and strains power grids. Implementing energy-efficient practices can help reduce these impacts and lower electricity costs.

End-of-Life Disposal:

The disposal of computers poses a significant environmental challenge. E-waste contains toxic materials like lead, mercury, and cadmium, which can leach into the soil and water if not properly handled. Responsible recycling and proper disposal methods are essential to prevent these hazardous substances from harming the environment and human health.

E-Waste Management and Recycling Strategies:

Environmental Hazards of E-Waste

E-waste contains hazardous substances that pose significant threats to the environment and human health. Toxic materials can contaminate soil, water sources, and air if not managed properly, making proper e-waste disposal essential.

E-Waste Collection and Recycling Programs:

To combat the challenges of e-waste, many countries and organizations have implemented e-waste collection and recycling programs. These initiatives aim to divert e-waste from landfills, recover valuable resources, and properly handle hazardous materials.

Responsible Disposal and Handling of E-Waste:

Responsible disposal and handling of e-waste involve ensuring that e-waste is recycled through certified facilities that adhere to proper environmental and safety standards. By supporting these practices and educating others about the importance of responsible e-waste management, we can contribute to a cleaner and safer environment.

Understanding and managing the environmental impacts of computers is not only key to mitigating climate change and resource depletion but also to safe guarding our own well-being and that of future generations. By making conscious choices and embracing sustainable practices, we can limit the negative consequences of our technological advancements on the environment

The Role of Green Computing in Sustainable Practices:

Green Computing is a vital aspect of promoting sustainable practices in the computer industry. It involves initiatives and technologies that aim to reduce the environmental impact of computing activities. By implementing energy-efficient computing technologies and embracing virtualization and cloud computing, we can significantly decrease our carbon footprint

Green Computing Objectives

Green Computing initiatives have a common objective: to minimize the environmental footprint of computing activities. This includes reducing energy consumption, using environmentally friendly materials, and promoting proper electronic waste management.

Government Policies and Regulations for Environmental Sustainability in Computing:

Government initiatives and regulations play a crucial role in promoting environmental sustainability in computing. These include setting environmental standards and certifications, implementing extended producer responsibility (EPR), and supporting initiatives that encourage sustainable practices.

Government Initiatives

Governments worldwide have recognized the importance of addressing the environmental impact of computing. They have implemented various initiatives to promote energy efficiency, reduce electronic waste, and encourage sustainable practices.

Environmental Standards and Certifications

Environmental standards and certifications help ensure that computers meet specific criteria for sustainability. These standards cover aspects such as energy efficiency, recyclability, and the use of hazardous substances. Certifications such as ENERGY STAR and EPEAT provide consumers with information about a product's environmental performance, enabling them to make more sustainable choices.

Extended Producer Responsibility (EPR)

Extended Producer Responsibility (EPR) is a policy approach that holds manufacturers responsible for the entire lifecycle of their products. In the context of computing, it means that manufacturers are accountable for the proper disposal and recycling of their products. EPR encourages manufacturers to design more environmentally friendly products and includes mechanisms for the collection and recycling of electronic waste.

**ECO-CRITICAL STUDY OF AMITAV GHOSH'S *THE HUNGRY TIDE*
A LOOK INTO THE ENVIRONMENT THROUGH THE WORK OF AMITAV GHOSH**

Roofeenafathima & Dharshini

ABSTRACT:

'Humans cannot survive without nature but nature can survive.'

Taking this issue in consideration, ecology is an important aspect in the current society. In literature, ecology seems to be lacking in the works of early Indian English writers. But the contemporary writers in Indian English Literature prefer to create awareness of the consequences of human actions which damages the planets basic life support system. Amitav Ghosh is one of those writers who concentrated on writing about eco-criticism in his works. This presentation on the Eco-Critical Study of Amitav Ghosh's *The Hungry Tide* explores the human relationship with nature because the story is set in the world's largest mangrove ecosystem – the Sundarbans. The novel portrays the life of animals, plants, and refugees in northeastern India.

KEYWORDS: Ecology, Literature, Nature, Eco-Criticism, Environment

A Sahitya Akademi Award winner, Amitav Ghosh, an Indian writer was born on July 11, 1956 in Kolkata. He has completed his studies in Dehradun, New Delhi. He was so interested in writing a novel about the national and personal identity, across the Indian and Southeast Asian people. He completed both his undergraduate and postgraduate at the University of Delhi. In 1982, he did his Ph.D. in social anthropology at the University of Oxford, following that he was teaching in many prestigious institutions like American University, Columbia University, and Queens College of the Town University of latest York. His first novel was *The Circle of Reason* which was published in 1986. It deals with terrorists and leaves India for Northern Africa and the Middle East. Next he wrote *The Shadow Lines* (1988) which portrays the departure of British people from India during 1947. These two works were a major part of his career as they got him the attention of an International readership and these two were written in English. He has won many prestigious awards across the world. *The Hungry Tide* has won the Hutch Crossword Book Prize in 2006.

The Hungry Tide begins with Kanai, a translator from New Delhi and Piya, a cetologist. Kanai, as soon as he saw Piya, he was astonished by the way she held herself. Piya wants to do a research on a rare species of dolphins in Canning. Kanai came to know that she is a foreigner. Kanai goes to Lusibari to read the diary to his aunt, Nilima, which was written by his uncle, Nirmal, before he died. Piya and Kanai travel to Sundarbans.

“It was true of course that this line was the only rail connection to the Sundarbans. But so far as he knew it was never used by tourists – the few who travelled in that direction usually went by boat, hiring steamers or launches on Kolkata’s riverfront.” – (pg. 4)

Later, Kanai invites Piya to Lusibari. He visits his aunt and he soon realizes that Nilima is still affected by Nirmal's death twenty years ago. Kanai remembers the landmarks of Sundarbans and thinks about Sir Daniel Hamilton who set up a cooperative society for people to live with no regard to caste or religion. Then Kanai learns the truth that Kusum was killed in Massacre in 1979. Her son, Fokir, now lives on the islands with his wife, Moyna and son, Tutul. Now Kanai reads the notebook which was written in May 1979. Nirmal mentioned that he was with Kusum on the Islands and he made sure what happened was not forgotten. Nilima gets very upset as Nirmal didn't mention anything about her. Kanai met Kusum in 1970 and had become friends. They had gone to performances of the local legend The Glory of Bon Bibi. As soon as the performance got over one night, Horen took Kusum away for her safety and Nirmal never saw her again for years.

On the other hand, Piya gets permission from the Forest Department and begins her research accompanied by a forest guard and a boat pilot, Mejda. Both men were not helping her, so she decides to ask a fisherman about the dolphins. Piya realizes that the forest guard wants to fine the fisherman and his son. The fisherman says to Piya that he often sees dolphins in the area. Piya wants to give money to the fisherman and falls into the water as the Forest Department boat pulls away. The fisherman saves Piya and pulls her into his boat. She wants to go with the fisherman as she is afraid to go with the forest guard. She asks the fisherman if he can take her to Lusibari. To that, he agrees that he can take her to Lusibari. Then the fisherman introduces himself as Fokir and his son Tutul. He treats her with respect. Next day, they make a visit to a place called Garjontola where they see seven Irrawaddy Dolphins swimming. Piya was shocked to see the dolphins behaving in a different way, as she believed, because the dolphins migrate daily out of a pool rather than twice a year. The next day, she observed the dolphins and was

mapping the riverbed. Fokir and Piya are in joy as they can communicate with each other well. The mapping of the riverbed by rowing in straight lines helps Fokir with the opportunity to fish for crabs. Piya loses her hand to a crocodile. Then she and Fokir row to Lusibari. There, Nilima invites Piya to stay in the guesthouse with Kanai and he decides to help Piya by translating what Fokir says the next day.

In the next several days, he reads Nirmal's notebook and he comes to know how Nirmal found involved with the settlement on Morichjhapi after he retired from teaching. During his early days, Nirmal was a famous Marxist in Calcutta. He was arrested and suffered from a mental breakdown, so he had to leave the city, so he spent thirty years as a teacher in Lusibari. In the course of that period, he wrote nothing. But he remained a firm believer in Marxist Theory, and his wife was annoyed by this thing. His wife spent those days developing the Babadon Trust, which provides healthcare and other services to the locals. She also developed a Women's Union to help the many widows on Lusibari, as it's common for men to die while out fishing.

Nirmal started visiting schools with the help of Horen after his retirement. One day, Nirmal and Horen were caught in a storm and they met Kusum on the Island of Morichjhapi. She told them about everything, like from finding her mother to joining the refugee march from central India to the Sundarbans. Nirmal was very happy that Morichjhapi was developed in a Marxist way, so he offered to teach the children there. Nilima found out that Nirmal was involved in the issue. She was very angry and insisted him about the refugees and said that the land was protected by forestland. Nilima refused to provide medical services to the people on the islands. Nirmal promised to keep his involvement secret and continued to go to Morichjhapi with Horen.

A restriction was started by the police on the island, which Kusum and Fokir survived. Though Kusum survived, she was worried about the settlers who had been killed by the people for the sake of animals. Then Nirmal heard that the police were going to attack the islands. Nirmal and Horen went to warn Kusum about the attack and while they were on their way, Nirmal completed the notebook. While Horen took Fokir away and saved the notebook for Kanai, Nirmal decided to stay on the Island. After some days, Nilima finds Nirmal in Canning. He died after a few months.

Piya and Kanai negotiate with Fokir and Moyna as they have to go out for a week to survey dolphins in Garjontola. Horen took them to his bhotbhoti, the Megha. Kanai accompanies them as a translator. Nilima is worried about the risks after she comes to know that Kanai is going with Piya. She says that the tigers kill many people every week. When she realizes that Kanai is interested in Piya, she tells him to be careful. Then Moyna asks Kanai to intervene between Fokir and Piya. To that, Kanai tries to convince Moyna by saying that he would be a better partner than Fokir, which angers Moyna. They all leave for Lusibari the next day. Kanai is very jealous of Fokir and Piya despite the language barriers. In the afternoon, the Megha's engine dies, but Horen manages to float it to a village where his relative will help fix the boat.

During the evening, Piya and Kanai hear the sound of water buffalo giving birth. They also hear voices on the nearby islands so they decided to go and investigate. They came to know that a tiger which killed two people had been caught in a building with a water buffalo, so the villagers were poking bamboo poles inside the building. Piya is angry and tries to break up the mob and Fokir pulls her way because the villagers want to burn the tiger alive. The next day, Piya and Kanai discussed what happened. Piya is shocked, but Kanai says that things like that

happen because environmentalists like Piya try to save tigers rather than people who are also a part of the habitat. He says that the government does not care about the poor people who are actually the real victims.

The following day, Piya, Kanai, and Fokir go to Garjontola to observe the dolphins. Piya talks about how she got interested in dolphins, and Fokir says that he knows of this place because Kusum talked about it. Then Fokir started to say some chants, as Kanai is the translator he said it is too hard to translate for Piya. After a few hours, Kanai agrees to help in observing the dolphins the following day on Fokir's boat. The next day, Kanai tried to make conversation with Fokir but it didn't work out. They reach Garjontola and Fokir points out those fresh tiger tracks and talks about how goddess Bon Bibi will protect people with good heart. He implied that we can check if Kanai has a good heart. After reaching there, Kanai falls in the mud and gets angry, this leads Fokir to leave. Soon after that, Kanai crashes inland to escape from the crocodile. He comes across a trigger and is rescued by Piya, Fokir and Horen. As they don't believe that he saw a tiger, he leaves for Lusibari.

The next day, Kanai leaves Piya and Fokir while he goes with Horen to Lusibari on the Megha. In the middle of their travel, they come to know about an upcoming cyclone and decide to go back to get Piya and Fokir. When they came back, the boat was missing so they decided to wait overnight for them. Piya and Fokir went to track the dolphins and found them circling a dead calf. That night, they drop the anchor far away from Garjontola, and Piya reads Kanai's letter. It had the translation of the chant that Fokir was chanting about the goddess Bon Bibi.

Early the next morning, Horen reveals to Kanai that both he and Nirmal were in love with Kusum. Kusum only liked Horen. Hours later, they come to a conclusion that they can't wait for

Piya and Fokir, so they leave Garjontola. As Kanai walks to the shore, he slips and the notebook he was carrying for Nirmal falls into the turbulent water. Later, when Kanai and Nilima are staying in the guesthouse during the storm, she tells him that the most important thing Nirmal did was build a cyclone shelter at the hospital. As he has lost the notebook, Kanai says he will rewrite Nirmal's story from his memory and Nilima's request to include her perspective within the tale.

During the storm, Fokir and Piya tie themselves to a tree on Garjontola, with Piya squeezed between Fokir and the trunk. After the storm's eye passes and wind changes, they spot a tiger. Unfortunately Fokir is fatally struck by a large object soon after. Piya, able to steer Fokir's boat toward Lusibari the next day, recounts the events to Kanai and Horen when they find her aboard the Megha. She stays in Lusibari for a few weeks and then returns a month later, much to Nilima's surprise. She shares her plan to collaborate with the Babadon Trust to establish a conservation program in the area, intended to involve local fishermen, and she wishes to name the program after Fokir.

"The Hungry Tide" by Amitav Ghosh weaves an intricate narrative that encompasses various themes including ecology, migration, love, and grief. Ghosh's title "The Hungry Tide" emphasizes the significance of the environment within the context of the novel. Through vivid storytelling, he portrays the lives of individuals residing in the Sundarbans, capturing the beauty and challenges of this unique setting. His narrative serves as a powerful exploration of the interplay between human lives and the natural world, emphasizing the profound impacts of environmental changes and the complex relationship between the inhabitants of the Sundarbans and their fragile ecosystem. The novel effectively connects the human relationship with nature,

illustrating how human actions both cause and are caused by the environment. Human activities like deforestation, fishing, and shrimp farming have a direct impact on the Sundarban's ecosystem. The novel delves into the spiritual connection between the characters and the environment. The beliefs and customs of the local communities are deeply rooted in nature, and they find solace, guidance, and meaning in their surroundings. *The Hungry Tide* provides a rich tapestry of the complex and interconnected relationship between humans and nature. It shows how human activities both impact and are influenced by the natural environment, emphasizing the delicate balance that exists in this unique and ecologically significant setting. The author approaches the themes of nature and human interaction in an ecocentric way. This means that, in his perspective, nature takes a central role, and the well-being of the environment is of utmost importance. Ghosh presents an ecocentric perspective that emphasizes the intrinsic value of nature and the need for a harmonious relationship between humans and the environment. Sundarbans mangrove forest plays a crucial and symbolic role throughout the narrative. The Sundarbans, a vast and complex ecosystem of tidal rivers, estuaries, and mangrove forests, serves as a powerful backdrop to the story and carries a symbolic meaning: Harsh Beauty and Danger: The beauty of the Sundarbans is contrasted with its inherent danger. It's a place of breathtaking natural beauty, but it's also a harsh and unforgiving environment, reflecting the dualities in human nature and relationships in the story. He captures the conflict between the environment and the resilient inhabitants of the Sundarbans.

This novel gives an overview of beauty and humanity. The following lines describes the nature as,

When we see a green lawn that has been watered with desalinated water in Abu Dhabi or Southern California been content to spend their water thriftily in nurturing a single vine or shrub, we are looking at an expression of a yearning that may have been midwived by the novels Jane Austen. (pg. 13)

Through the lens of ecological literary criticism, the novel delves into the current environmental challenges faced by the region, emphasizing the delicate balance between the natural elements of water and Earth. Ghosh skillfully portrays the complex connections between the landscapes, the communities living within it, the water that defines their existence, and the cultural differences that shape their lives. His narrative underscores the enduring struggle between the inhabitants and their surroundings, highlighting the profound impact of environmental changes and the resilient spirit of those who call the Sundarbans their home. The changes in the Sundarbans serve as a backdrop for the evolving relationships and challenges faced by the characters in the novel. It underscores the dynamic and interconnected nature of both the natural environment and the human experiences depicted in the story. The force of nature is a central theme, and the lives of the characters are intricately woven into the extraordinary environment of the Sundarbans.

Humans have reshaped the entire island they converted the forest and the mangroves into the destruction of a forest but cutting down all the trees around them by constructing buildings and these changes destroyed the life of habit for seabirds, animals living place, etc., traced out as the root cause for the ecological and environmental problems and the source for hungry tides and earthquakes.

I had planned to stay late, but the unseasonal weather led to change of mind and I decided to leave. But the weather continued to worsen as we were chatting so after a few minutes I decided to head straight back by a route that I rarely needed to take. (pg. 15 – 16)

The novel underscores the delicate and complex nature of human existence on our fragile planet. *The Hungry Tide* weaves a narrative that underscores the power fragility, and interconnectedness of human existence within a remarkable, but perilous, natural environment. It serves as a reflection on the broader implications of how humans interact with the natural world on our planet. Moreover, the tigers in *The Hungry Tide* symbolize the resilience and power of nature. They also act as a reflection of the characters' own internal conflicts and struggles. Like the tigers, the characters grapple with their own inner demons and desires, mirroring the broader theme of the human-nature connection.

Wasn't this why people who lived in close proximity with tigers so often regarded them as being something more than just animals? Because the tiger was the only animal that forgave you for being so ill at ease in your translated world?

Thus the novel deals with the issues faced by the people and it is important to address these problems and find a solution to these issues. Safeguarding the environment is imperative for ensuring the sustainability of our planet by implementing sustainable practices, conserving natural resources, reducing, pollution, and protecting biodiversity, we can strive to mitigate the adverse effects of climate change and promote a healthier and more sustainable world. It is essential for individuals, communities, and governments to work together in adopting responsible and eco-friendly practices to ensure a harmonious coexistence with nature.

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